


UNIVERSITY OF TORONTO



3 1761 01366936 1





Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

THE
STUDENT'S GUIDE

TO THE

University of Cambridge.

Cambridge:

PRINTED BY C. J. CLAY, M.A. AND SONS,

AT THE UNIVERSITY PRESS.

Cambridge, University of

THE
STUDENT'S GUIDE

TO THE

University of Cambridge.



FIFTH EDITION, REWRITTEN.

65.817
20/6/0

CAMBRIDGE:
DEIGHTON, BELL AND CO.
LONDON: GEORGE BELL AND SONS.

1893

PREFACE.

SO many and such important changes have taken place in the curriculum of the University during the last few years that the revision of this volume has practically involved the rewriting of several of the sections. Not only has the scope of some of the examinations been much altered but also the regulations under which they are held, and a new Tripos—for Medieval and Modern Languages—has also been instituted. In most cases the revision has been intrusted to the same hands which originally contributed the various sections but where this has been impracticable the matter of the previous edition has been freely used. The issue of the volume has been delayed in order that certain new regulations which were under consideration might be included and though it can hardly be expected that no further alteration will be required it is hoped that the book in its present form will supply a trustworthy guide to students and that a new edition will be called for before any further important changes become necessary.

CONTENTS.

- INTRODUCTION. By Rev. Canon Browne, B.D., Hon. Fellow of St Catharine's College, Disney Professor of Archæology.
- UNIVERSITY EXPENSES and NON-COLLEGIATE STUDENTS. By T. F. C. HUDDLESTON, M.A., King's College.
- THE MATHEMATICAL TRIPOS. By W. H. BESANT, Sc.D., F.R.S., Fellow and late Lecturer of St John's College.
- THE CLASSICAL TRIPOS. By Rev. R. BURN, M.A., Fellow, Praelector and formerly Tutor of Trinity College.
- THE THEOLOGICAL EXAMINATIONS. By the Right Rev. the Bishop of DURHAM, revised by Rev. Robert SINKER, D.D., Trinity College.
- THE LAW TRIPOS. By E. C. CLARK, LL.D., F.S.A., Regius Professor of Civil Law.
- DEGREES IN MEDICINE AND SURGERY. By Sir GEORGE MURRAY HUMPHRY, Professor of Surgery and Fellow of King's College.
- THE NATURAL SCIENCES TRIPOS. By W. N. SHAW, M.A., F.R.S., Fellow and Tutor of Emmanuel College, University Lecturer in Physics.
- THE MORAL SCIENCES TRIPOS. By JAMES WARD, Sc.D., Examiner for the Moral Sciences Tripos and Lecturer and Assistant Tutor of Trinity College.
- THE HISTORICAL TRIPOS. By G. W. PROTHERO, M.A., Fellow of King's College.
- THE PREVIOUS EXAMINATION AND THE ORDINARY OR POLL DEGREE. By Rev. J. T. WARD, M.A., Fellow of St John's College.
- THE LOCAL EXAMINATIONS, LECTURES &c. By Rev. Canon Browne, B.D.
- THE MEDIEVAL AND MODERN LANGUAGES TRIPOS. By E. G. W. BRAUNHOLTZ, M.A., University Lecturer in French.
- THE ORIENTAL TRIPOSES. By the late Professor C. H. PALMER, M.A., revised by J. PEILE, Litt.D., Master of Christ's College.

INTRODUCTION.



ALTHOUGH in the Middle Ages a large number of young men resorted to the University of Cambridge for the sake of some special study or teaching, without any intention of taking a degree, the direct object of an undergraduate Student at Cambridge now is usually to obtain a degree in Arts, Law, Medicine, or Surgery. Degrees in Divinity are granted only to persons who have already graduated (i.e. taken a degree) in Arts. For degrees in Music, residence and study in Cambridge are not required.

The first degree which is conferred is that of Bachelor, and the vast majority of Students become Candidates for the degree of Bachelor of Arts. It is the object of this introductory article to describe in outline the course of a Student before he takes this degree,—that is, of an Undergraduate.

In order to obtain the Bachelor of Arts degree it is indispensably necessary, (1) to become a member of the University, by being admitted as a member of a College or as a Non-Collegiate Student and being “matriculated” (see p. 12), (2) to reside

for a certain period in Cambridge, (3) to pass certain examinations.

We will first consider the student's relation to his College and to the University. If he be a Non-Collegiate student, instead of his relation to a College we have to consider his relation to the officers of the Board to which the University entrusts the supervision of such students. First, then, as to the College. There are seventeen Colleges at Cambridge and one Public Hostel (Selwyn College), and they differ considerably in the advantages which they offer to their members. The selection of one College rather than another, or of a College rather than the position of a Non-Collegiate student, is often made with a view to other than purely educational advantages. It being assumed that with whatever body a student is connected he is equally likely to take a degree, both the student and his parents appear to think comparatively little of the question whether abler teachers are to be found in one College than another. The most studious think of the prizes offered in a College, and as far as they take account of the better or worse teaching to be obtained, they regard it chiefly as affecting their chance of gaining high University distinction; the less studious think more of the opportunities of living agreeably in a congenial society.

The incidental advantages of life at the University are for a large proportion of the students quite equal in importance to the intel-

lectual culture or the information to be secured there. The opportunity for mixing with a considerable society of young men, at an age when intimacies are readily formed, in a state of freedom tempered by an easy and well-understood discipline and by an obligation to do some intellectual work, is of high value to all who come to the University prepared to use it. The arrangements of a College are particularly favourable to social intercourse of its members one with another. The smaller the College is, the more likely is it that all its members, or at least all who are of the same standing so far as length of residence is concerned, will be acquainted with one another, if there be no marked disparity of previous education or social training to keep them apart. The diffident will thus find themselves introduced into a society ready formed for them; those of less culture, or less force of mind or character, will benefit by mixing with their neighbours. At any given time something of a common tone, both social and moral, will prevail in the whole society of a moderate-sized College; and as this may change rapidly, it concerns those who are choosing a College for an average student, to get such information as they can as to the reputation, at the time, of the undergraduate society of each College that is in question. This is not less important, and it is sometimes less easy, than it is to ascertain what reputation the Tutor has for stimulating the minds or guiding the conduct of his pupils. A person of greater

force of character may be more independent of these considerations. If his choice is not determined in favour of a small College, by personal connexion or the hope of prizes, such a student may prefer one of the larger, as offering either greater variety of companionship, or a greater number of persons whose tastes and circumstances are similar to his own. Members of different Colleges meet together in associations for religious, literary, social, or athletic purposes; ties of school friendship, of home neighbourhood, or of family connexion, frequently unite members of different Colleges or different social sets in the University; and each new acquaintance may in its turn become an introduction to others. But all these causes together do less to mark out the circle of acquaintance of any one average undergraduate than membership of one and the same College. If it is important to consider what the society is into which a freshman is to be introduced, it must also be considered how far he is himself a person likely to make what is good in the society his own, and to withstand any temptation he may meet in it. What he gets from the society will very much depend on what he brings to it.

What has been said is to a certain extent affected by the difference between living within the walls of a College, and living as a College undergraduate in licensed lodgings; but the interval is much larger which measures the difference between a member of a College and an ordinary

Non-Collegiate student. The latter does not necessarily come into any close association with the men of his own class. He has no dinner in Hall, no compulsory lectures, no rule requiring attendance at daily religious worship, to connect him with other Non-Collegiate students of the same standing. If he chooses to restrict his intercourse with them to the narrowest limits, he will sometimes meet them at the rooms of the officer who has the charge of them, at University lectures or examinations, and possibly at College lectures, but need not meet them elsewhere. The only duty prescribed to Non-Collegiate students, as distinguished from other undergraduates, is to call at the Censor's office on five days of the week at times indicated by him, and to sign their names in a book kept for the purpose. At the lectures which they attend in Colleges or in the University, they are associated with members of Colleges. They have however a common library and reading-room; cricket and football and tennis clubs have been formed among them; and other voluntary associations spring up from time to time and draw more closely together as members of one body those who wish to be thus united. At present the Union Debating Society, the Volunteer Corps, the University Football Club, and other University Associations and Clubs, are as likely to bring them into contact with members of Colleges as to draw them nearer to one another. The wider the area covered by these organizations, the

less likely they are to affect the condition of an otherwise friendless or diffident student. On the other hand, one who is desirous of society, and has ordinary social power, need not long be at a loss for opportunities of making sufficient acquaintance to render his Cambridge life pleasant, as well as wholesome. If the student is older than usual, or is married, or lives with relations in the town, it makes comparatively little difference to him whether he is a member of a College or not.

The student who has selected a College should write to the Tutor of that College; one who wishes to be a Non-Collegiate student should write to the Censor of Non-Collegiate students. The names of these officers will be found in the Cambridge Calendar; through them most of the business of the student with the College or the Board is conducted. To the College Tutor or the Censor the applicant for admission, and the newly arrived student or 'freshman,' should habitually apply for direction. At most of the Colleges the candidate for admission must produce a certificate¹ signed

¹ *Form of Certificate for admission at _____ College.*

"I hereby certify to the Master and Fellows of _____ College, that I have known A. B. for ___ years, and have also examined him; and that I believe him to be both as to learning and moral character, a fit person to be admitted of _____ College in the University of Cambridge.

(Signed)

_____, M.A.

of _____ College,

Cambridge."

Date

by a Cambridge M.A., attesting that he is of suitable character, and has been examined by him and found to be qualified; he must at the same time pay a certain sum as Caution Money (the amount of which will be found under the head of College Expenses), and at some Colleges an Entrance Fee, the amount of which will be found under the head of each College. If he is unprovided with such a certificate as is described above, he may be examined by the Tutor himself or by some other of the officers of the College.

At some Colleges an examination is held which every freshman must pass before he can be matriculated; the subjects of this examination are stated in the Tutor's circular sent to applicants for admission. At Trinity College, in filling up the vacancies, priority is given to those who acquit themselves with credit in the examination for Scholarships; for the remaining places there is a competitive examination in March or April, and, if need be, a supplementary one in October. The Tutors receive the names of applicants on the understanding that they will present themselves at some of these examinations. The purpose of such preliminary examinations is to exclude candidates who are not sufficiently advanced to profit by the elementary courses of lectures delivered in the College. In other cases, if the candidate be approved by the College Examiners he presents himself with a view to commencing residence, and if his certificate is satisfactory, he is admitted, and

his name is placed on the boards which are suspended in the College butteries.

For Non-Collegiate students there is generally no preliminary examination; but the Board requires satisfactory testimony as to the character of the applicant and his fitness to become a member of the University. A sum of £3 Caution Money is required, besides an Entrance Fee of £2.

A minor must be entered by authority of his guardian; if the candidate for admission have attained his majority, personal references are usually expected.

The period of residence must be during term-time, i.e. the part of the year during which the business of the University is carried on. There are three terms in each year, the Michaelmas or October Term, beginning on the 1st of October and ending on the 19th of December; the Lent Term, beginning on the 8th of January and ending on one of the days from March 19 to April 5 inclusive, according to the early or late incidence of Easter Day; the Easter or May Term, beginning on one of the days from April 10 to April 27 inclusive, and ending on the 24th of June.

It will be seen that the Michaelmas term contains always 80 days. The Lent and Easter terms together contain 147 or 148 days. To "keep" a term, a student must reside for at least three-fourths of the term. Thus the minimum residence in the year is 171 days.

As University residence may commence in

any of the three terms, it will be desirable to point out in which term residence may, generally speaking, be most conveniently commenced. For this purpose it will only be necessary to consider the case of Students in Arts, since these form the great majority.

Students in Arts are either Candidates for the Bachelor of Arts degree in Honours, that is, "Honour men", or Candidates for the Ordinary B.A. degree without Honours, that is, "Poll men."

The period of residence required for the degree of Bachelor of Arts is nine terms. Thus a person entering in January 1892 may become eligible for his degree in December 1894; entering after Easter 1892, in March 1895; entering in October 1892, in June 1895. But the final examinations for the Ordinary B.A. degree occur only twice a year, in June and December, so that a Poll man who enters in the Easter Term 1892, must wait till June 1895 before he can be examined for his degree. For a Poll man who wishes his University course to cover as short a part as possible of three years, the choice is thus limited to January and October. If he enters in October he has the shortest course, owing to the fact that the Long Vacation, that is, the time during which lectures are suspended between June and October, enters only twice, and not three times, into his course. The ordinary arrangements of the Colleges are made with a view to entry in October, and that is

the most convenient time for students in general. The course of Examinations for the Ordinary Degree is such that any person of common abilities and common preliminary training, with tolerable industry while at Cambridge, may reckon upon passing through it in nine terms. In the case of some very backward men, it may be well to come up a term earlier; but this should only be done on the advice of persons competent to form an opinion on the subject.

For those who wish to take their degree in Honours, which is the best time to enter? Such persons may desire their time of preparation to be as long as possible. For Candidates for Honours in any Tripos a limiting period is fixed, in order to equalize the competition. The Honour Examinations are held only once a year, in May and June. To be examined in one of them and to gain a degree by it, a student must have entered on his eighth term at least, having previously kept seven terms; or he may be in his ninth term, or, in his tenth term, at the time of the Examination, but not in his eleventh (but see p. 28). The student may therefore generally secure the option of the shortest or the longest period of preparation by entering at Easter. But College arrangements never encourage this, and in some cases they do not permit it. It is sometimes not inconvenient to commence residence in January. But the most convenient and usual time for entering the Colleges is October, whether for Honour men or for Poll men. The

course of studies prescribed in each College begins at this point; and the Examination held in each College on the eve of the Long Vacation, for those of its students who are not at the time undergoing any University Examination, commonly embraces the subjects on which lectures have been delivered from the October previous. Non-Collegiate Students, who are only partially affected by College arrangements, may enter in any term, subject to the above-mentioned conditions as to the times at which the University examinations occur. But even these students may in their first year at least derive more assistance from such College lectures as are open to them, if they have entered in October, than if they have chosen either of the other terms for the commencement of their residence.

A person is not said to be *resident* in the University, even though he be living in Cambridge, unless he either is occupying rooms in College or in one of the lodging-houses in the town which have been licensed to receive University men, or is living with his parents, or, under special circumstances approved by the authorities of the University, with other friends, or in his own or in a hired house. Once resident, a student or pupil, that is, every member of the University under the degree of Master in some faculty, cannot go out of residence without the written permission (called an *exeat*) of the Tutor of his College, or, if a Non-Collegiate student, of the Censor. Students who

have been guilty of misconduct are sometimes sent away before the end of the term, and as it is necessary, in order to obtain a degree, to have resided nine terms, the effect of this punishment may be to prolong by a term or by half a year the period of undergraduateship. Residence for three-fourths of the term is accepted by the University as residence for the term (see p. 8).

Having become a member of a College, or a Non-Collegiate student, the freshman has to be formally enrolled as a member of the University. This enrolment, which is called Matriculation, does not, however, take place immediately on commencing residence, but on the first day of the second quarter of the term. The ceremony is performed in the Senate-House in the presence of the Registrar, who receives at the time from the Tutor or the Censor the Matriculation fee of each student. This fee is paid by a member of a College to the Tutor, either on entrance or in his first account; by a Non-Collegiate student it is paid to the Censor before the Matriculation.

The student's first business on arriving at Cambridge will be to procure himself rooms, if this has not been done for him already. The Tutor will inform him whether any sets of rooms within the College itself are vacant, and if not, which of the licensed houses in the town can admit him. The Censor in like manner will advise the Non-Collegiate student as to the choice of licensed lodgings, and in special cases may take steps to procure

special licenses. In no case should the student engage lodgings without the consent of the Tutor or Censor. At many of the Colleges there is not room within the walls for the freshmen, and in many cases they have to wait more than one term for admittance. Some persons prefer lodgings to rooms in College. They have one practical advantage, viz. that in them the servant can be summoned at any time, whereas in College rooms there are no bells, and the servants are not constantly in attendance but make their rounds at fixed hours. On the other hand, so far from there being greater liberty in lodgings, as might be supposed, there is in one way a good deal less. The lodging-house keeper is bound to lock his door at 10 o'clock, and the student is then confined to the house; whereas the closing of the College gate at the same hour leaves to those within liberty to range the whole College. Nor again does the student in lodgings get the full advantages of College life; and he will generally be at a greater distance from Chapel, Hall, and the Lecture-Rooms.

Among the first and most indispensable steps to be taken after entering, is the purchasing of a cap and gown. Each College has its own pattern for the gown worn by its undergraduates; for Non-Collegiate students also a distinct pattern is prescribed. The proper gown, with the cap, will be furnished by any University tailor. The cap and gown constitute the Academic dress. They are to be worn in a proper manner on all occasions

when the student appears as a member of the University or College, in the Senate-House and the University Church, at Examinations, when visiting the Officers of the University or the Master, Tutors, and other Officers of the College, at all University or College lectures, at the public dinner in the College Hall, and, except when the surplice is worn (i.e. on Sundays, Saturday evenings, Saints' days and eves) at the College Chapel. In the case of Non-Collegiate students the surplice is not required. For the sake of discipline, the cap and gown are required to be worn by all students in the streets in the evening, and throughout the whole of Sunday. These rules are strictly maintained, and the freshman must not treat the observance of them as an unimportant matter.

The University treats all of its undergraduate members alike, whether members of Colleges or Non-Collegiate students; the difference between the two classes consists in the fewer points of contact between the Non-Collegiate student and the Censor, as compared with those between the Collegiate student and the College through its authorities and institutions.

The University is to be considered (1) as affording instruction; (2) as holding examinations; (3) as giving prizes and scholarships; (4) as conferring degrees; (5) as maintaining discipline.

1. It affords instruction, especially by means of a staff of Professors, Readers, and University

Lecturers, who deliver lectures in several public rooms belonging to the University. The Professors are :

| | | |
|--------------------------|---|---|
| Divi- nity. | { | Regius Professor of Divinity |
| | | Lady Margaret's do. |
| | | Norrisian do. |
| | | Hulsean do. |
| Mathe- matics. | { | Lucasian Professor of Mathematics. |
| | | Plumian Professor of Astronomy and Experimental Philosophy. |
| | | Lowndean Professor of Astronomy and Geometry. |
| | | Sadlerian Professor of Pure Mathe- matics. |
| Moral Science. | { | Professor of Moral Philosophy. |
| | | Professor of Political Economy. |
| Natural Science. | { | Professor of Zoology and Comparative Anatomy. |
| | | Professor of Botany. |
| | | Professor of Geology. |
| | | Professor of Mineralogy. |
| | | Professor of Chemistry. |
| | | Jacksonian Professor of Natural and Experimental Philosophy. |
| | | Professor of Experimental Physics. |
| | | Professor of Mechanism. |
| Professor of Physiology. | | |

| | | |
|---|---|---|
| Law. | { | Regius Professor of Laws. Downing Professor of the Laws of England. Whewell Professor of International Law. |
| History. | | Professor of Modern History. |
| Medicine. | { | Regius Professor of Physic. Professor of Anatomy. Downing Professor of Medicine. Professor of Surgery. Professor of Pathology. |
| Lan- guages and Litera- ture. | { | Regius Professor of Greek. Professor of Latin. Regius Professor of Hebrew. Professor of Sanskrit. Adams's Professor of Arabic. Lord Almoner's Professor of Arabic. Professor of Anglo-Saxon. Professor of Chinese. |
| | | Professor of Music. |
| | | Disney Professor of Archæology. |
| | | Slade Professor of Fine Art. |

Thus a large number of subjects is constantly being treated by University Professors, the number of whom has been considerably increased of late years. Since 1882 the two classes of University Instructors called "Readers" and "University Lecturers" have been established. These are already as numerous as the Professors. The

subjects in which Readers have been appointed are:—English Law; Indian Law; Comparative Philology; Classical Archæology; Botany; Rabbinic. The subjects in which University Lecturers have been appointed are:—Sanskrit; Persian; French; German; Comparative Philology; History (six); Moral Science; Geography; Mathematics (five); Natural Science (eight); Medicine and Surgery (five); Experimental Physics; Harmony and Counterpoint.

2. The University holds examinations. If the student undergoes examinations in his own College, these are preparatory and subordinate to those to which he will be subjected by the University.

The one examination which every student who cannot claim the exemptions mentioned below must pass before he can be admitted to a degree, is the Previous Examination, better known colloquially as the Little-Go.

This examination may be described, first, as it affects the average Poll man, secondly, as it affects the better prepared student. First, then, in the case of the average candidate for a degree without Honours: it is held in June, October, and December of each year, and at each time consists of two parts. The First Part embraces one Gospel in the original Greek, one Latin Classic and one Greek (for example, two books of Ovid's *Fasti* and one book of Herodotus). In each of these subjects

passages are set for translation, and questions on the subject-matter, grammar, &c. There is also a paper of easy passages of Latin taken from other books, to be translated with the help of a dictionary, and a paper on Latin and Greek accidence and syntax. In place of the Greek Gospel, those who desire to do so can take an additional paper on a Greek or Latin Classic other than those selected in ordinary course. There is no oral examination, the examination being conducted entirely by printed papers. The Second Part includes Paley's Evidences; Elementary Geometry, viz. the substance of Euclid, Books I., II., III., Definitions 1—10 of Book V., and Props. 1—19 and A of Book VI.; Arithmetic; Elementary Algebra as far as easy Quadratic Equations of not more than two unknown quantities, and the elementary rules of Ratio, Proportion, and Arithmetical and Geometrical Progression. A matriculated student in his first or any later term of residence may present himself for either Part separately, or for both Parts of the examination, at any time of its occurrence. The Gospel and the Classics fixed for June are also subjects of the October and December examinations in any given year. Though either Part may be passed separately, both are required to be passed by every student before he can present himself as a candidate in any of the more advanced examinations necessary for a degree. Thus a Poll man who has commenced residence in October should pass both

Parts in his first year. At each examination in each Part a fee has to be paid. The University allows a student to present himself as a candidate in this examination any number of times; but the College, or the Non-Collegiate Students' Board, may refuse to retain a student who has failed to pass the examination in his first year. It is necessary to observe that every person is required in writing his answers to conform to the rules of English Grammar, including Orthography; and no one is to be approved by the examiners who has failed to satisfy them in that respect.

Secondly, those who intend to graduate with Honours in any Tripos must not only pass both the First and Second Parts of the Previous Examination, already described, but they must also satisfy the examiners in Additional Subjects, choosing one of the following:—(1) Mechanics with Elementary Trigonometry, (2) French, (3) German. In (2) and (3) no special books are set. This additional examination may be passed either at the same time with the ordinary Previous Examination or at any subsequent holding of the Previous Examination. Freshmen may pass the whole of the Examination in the first days of October, and then they are free to work for the more advanced Examinations. For Honour men this is a usual course.

The Previous Examination being intended for all students alike, and being placed early in the course, may be described as fairly easy. But even

advanced students must be careful to observe that the required standard must be reached in each subject, and that excellence in one is not allowed to compensate for deficiency in another.

The certificate of the Oxford and Cambridge Highest Grade Schools Examination Board, if it covers the proper subjects, exempts a student from either Part of the Previous Examination, or from the Additional Subjects; and the same privileges are obtainable by means of the Senior Local and Higher Local Examinations. In these ways students who are sufficiently well prepared may secure exemption from the whole of the Previous Examination before they enter the University, and may thus devote themselves to uninterrupted study of the subjects in which they wish to graduate with honours. Natives of Asia not of European parentage may, if they prefer it, substitute for the Greek Subject a play of Shakespeare or some other English classic, and for the Greek Gospel the same Gospel in English or a modern English Prose work of historical character.

Candidates for Degrees in Law and Medicine are required to pass the Previous Examination. The great majority of the students graduate in Arts, and about half of these without Honours.

After passing the Previous Examination, the candidates for Honours and the candidates for the Ordinary Degree have a different course before them. The former class, if they seek distinction in one Tripos only, have only the examinations for

that Tripos to pass, and they may devote the whole remaining time exclusively to the special subjects which they find themselves best able to master. They may, however, and not unfrequently do, endeavour to achieve distinction in more than one of these subjects. Those, on the other hand, who propose to try for the Ordinary Degree only, must submit to two more examinations, the General Examination, consisting of two Parts, and one of the Special Examinations, most of which consist of two Parts.

A student who has passed or obtained exemption from both Parts of the Previous Examination, may take one but not both Parts of the General Examination in his third term of residence; he may take both Parts, or either, in his fourth or any later term. There is an Examination in both Parts in June and in December. Part I. consists of five papers, viz. (1) one of the Greek Classics, (2) one of the Latin Classics, (3) Algebra (easy equations of a degree not higher than the second, involving not more than two unknown quantities, proofs of rules of Arithmetical and Geometrical Progression with simple examples, and easy Elementary problems), (4) Elementary Statics, (5) translation from English into Latin Prose, a voluntary paper. Part II. also consists of five papers, viz. (1) the Acts of the Apostles in the original Greek, (2) a selected portion of English History, (3) an Essay or Essays on subjects from the period of English History, (4) Elementary Hydrostatics,

(5) a play of Shakespeare or some portion of the works of Milton, a voluntary paper. Students are required to attain a certain standard in each subject separately, and, besides, to obtain a certain total of marks. The list of successful candidates is divided into four classes, the names in each class being arranged alphabetically.

The student who has passed both parts of the General Examination by the end of his fourth term can if he pleases take the First Part of his Special Examination at the end of his sixth term, and then he has a whole year to read for the Second Part of his Special Examination, which he takes at the end of his ninth term. He has a large choice. The subjects of the Special Examinations are as follows:—(a) Theology; (b) Logic; (c) Political Economy; (d) Law; (e) History; (f) Chemistry, (g) Geology, (h) Botany, (i) Zoology, (j) Physiology; (k) Mechanism and Applied Science; (l) Music; (m) Modern Languages; (n) Mathematics; (o) Classics. The Examinations in Logic, Geology, Botany, Zoology, and Physiology, are Parts of the Moral and Natural Sciences Tripos Examinations, and are therefore held only at the end of the Easter Term in each year; the ordinary student will thus take any of these Examinations at the end of his ninth term; if he originally came up a term later, so that he is only at the end of his eighth term, he can still enter the Examination, but he must keep a ninth term before being actually admitted to his degree. The

other Special Examinations are held both at the end of the Easter Term and at the end of the Michaelmas Term.

As examples of the character of the Special Examinations, it may suffice to state the subjects of two of them. The Subjects of all are fully stated in this guide under head of The Ordinary Degree.

The Special Examination in Theology consists of:—Part I., (1) Outlines of Old Testament History, (2) One of the Gospels in Greek, (3) The History of the Jews from the close of the Old Testament History to the Fall of Jerusalem, with special attention to the condition of Palestine in the time of our Lord, a voluntary paper; Part II., (1) Selected portions (i) of the Historical Books of the Old Testament, and (ii) of the Psalms or Prophets, (2) One or more of the Epistles in Greek, (3) Outlines of English Church History to 1830, (4) A selected portion of the Historical Books of the Old Testament in Hebrew, with easy questions on Hebrew Grammar, a voluntary paper, (5) Outlines of Early Church History to the death of Leo the Great, a voluntary paper, (6) a selected subject or period of English Church History, with a selected original authority in English, a voluntary paper.

The Special Examination in Classics consists of:—Part I., (1) Selected portions from not more than two Greek Prose authors, (2) Selected portions from not more than two Greek verse authors,

(3) Unprepared Translation from Greek, (4) A selected portion of Greek History, a voluntary paper; Part II., (1), (2), (3), Latin, as (1), (2), (3) of Part I., (4) Latin Prose Composition, (5) a selected portion of Roman History, a voluntary paper.

The particular Books set for any particular year are announced in good time beforehand in the *University Reporter*. The list of books can be obtained from Messrs Deighton, Bell and Co., Trinity Street, Cambridge.

The Honour Examinations held annually for the degree in Arts are of course of a much severer character. Into these flock annually the ablest young men, who three or four years earlier were at the head of their schools, and who during their University course have received all the instruction that the best Tutors, and all the stimulus that a competition well known to be severe, can give. There are kinds and degrees of excellence which cannot be tested at all by the method of examination; but to "take a good degree," as it is somewhat inaccurately called, remains a high object of ambition, requiring either abilities above the average level, or a course of steady industry pursued through some years.

The following is a list of the Honours Triposes: Mathematics; Classics; Moral Sciences; Natural Sciences; Theology; Law; History; Semitic Languages; Indian Languages; Mediæval and Modern Languages. The Examinations are all held in May and June of each year.

With a view to rendering it likely that a fair number of the best prepared students may compete for Honours in more than one class of subjects, changes have been made in the arrangements of several of the Tripos Examinations, both by dividing them into two Parts (which a student can not take in the same year) and by altering the time of their occurrence and the standing required of Candidates. Students can now, if they do not wish to take in regular course the First and the Second Part of one and the same Tripos, take Honours in the First Part of one Tripos at the end of their second year (in which case they must pass another Examination and complete nine terms of residence before they can be admitted to the B.A. degree) and in the Second Part of another at the end of their third year, proceeding then to their degree; and other combinations of Triposes have been made possible. Further, a student who has passed in one Tripos is allowed to enter for another Tripos a year later than those who have not this qualification (see p. 28).

In the case of all the Triposes the candidates who pass the Examination with sufficient success and are of proper standing receive a degree in Honours. For those who do not pass with sufficient credit there are degrees of failure:—the Examiners may recommend that such a candidate shall be admitted to the Ordinary degree, without Honours; or, a stage lower, they may recommend that he be excused the General Examination, and

then he has to pass one of the Special Examinations before he can obtain a degree; or they may reject him entirely. Candidates who from illness or other sufficient cause have been absent from a part of a Tripos Examination may according to the merit of their performances be declared to have deserved either Honours, or an Ordinary Degree, or exemption from the General Examination.

The Mathematical Honours Examination is widely celebrated, and has given to this University its character of the Mathematical University *par excellence*. It was instituted before the middle of the last century. It is divided into two Parts. Part I. determines the list of Wranglers, Senior Optimes, and Junior Optimes, each of these three classes being arranged in order of merit. This corresponds very much to the old Mathematical Tripos of thirty years ago. Part II. is treated as a separate examination, to which those only are admitted who have been Wranglers in the list published in the preceding June. The list of honours in Part II. is arranged in three divisions, each in alphabetical order. The Examination in Part I. is confined on the first three days to the more elementary parts of Pure Mathematics and Natural Philosophy, the subjects to be treated without the use of the Differential Calculus and the methods of Analytical Geometry. Some days after this, the Examiners issue a list of those who have done well enough to be admitted to the remaining part of the Examination, which

lasts three more days and includes:—more advanced Algebra; Trigonometry (Plane and Spherical); the easier parts of Analytical Geometry (Plane and Solid); Differential and Integral Calculus, with the easier parts of Differential Equations; Statics; Hydrostatics; Dynamics of a Particle; the easier parts of Rigid Dynamics and of Optics; Spherical Astronomy. On the marks obtained in these six days, the list of Wranglers, Senior Optimes, and Junior Optimes is drawn up and published. In Part II. the Examination embraces eight groups of subjects, in which Pure Mathematics and Physics are not very unequally represented, and a student may be placed in the first division if he has shewn proficiency in any two of these groups.

A student may enter for Part I. at the end of his second or of his third year. To be admitted to Part II., he must have obtained Honours in Part I. in the preceding year. The regulations for those who present themselves for Part I. at the end of their second year are similar to those for the Classical Tripos, see page 28.

The Classical Tripos was founded in 1824. The Examination is divided into two Parts. The first Part occupies six days and includes:—passages from English writers in Prose and Verse, to be turned into Latin Prose and Verse and Greek Prose and Verse respectively; passages for translation from Greek and Latin Authors, together with questions arising out of such passages; and

four additional short papers containing questions on Greek and Roman History (including Literature), on Greek and Roman Antiquities, and on Greek and Latin Grammar and Criticism. The questions in this Part do not require a special and technical knowledge of the subjects included in the Second Part. For admission to the First Part a candidate is required to have entered upon his fifth term at least, having previously kept four terms, and, unless he has previously obtained Honours in some other Tripos, nine complete terms must not have passed since his first term; if he has already won Honours in some other Tripos, he may enter a year later than this. The list of those to whom Honours are awarded is divided into three classes, each consisting of one or more divisions, the names in each division being in alphabetical order. The student who obtains a place in this Tripos before his eighth term of residence is not thereby entitled to be admitted to a degree, even after the required residence has been completed; but he can compete in other Tripos Examinations after a longer period in consideration of the Honours already gained, or, if he wishes to take the Ordinary B.A. Degree, he is excused the General Examination for that degree, and it only remains necessary to pass one of the Special Examinations for it. A student approved in the first part of the Classical Tripos Examination in his eighth or any later term of residence is entitled to the degree without further

examination when he has completed the necessary residence. But the best scholars, whether they have passed the First Part in their second or third year, commonly present themselves a year later for examination in the Second Part. In some cases Part II. is chosen as the means of obtaining the degree at the end of the student's course, but its main importance is as a test of more advanced scholarship than is requisite for a degree. One section (*A*) is obligatory on all candidates, containing passages for translation from English into Latin and Greek Prose, and passages from Latin and Greek authors for translation into English. As the whole field of classical study is too large to be traversed even by the most able and diligent of those for whom examinations are instituted, specialisation is encouraged by the provision of four other sections, of which each student may offer one, or two, but not more than two. Sections *B* (Ancient Philosophy), *C* (History), and *D* (Archæology), include each of them five papers of three hours; in Section *E* (Language) four papers are set, in addition to which any Candidate may send up, fourteen days before the examination begins, an English Essay on some subject comprised in the Section, and be examined *vivâ voce* upon it at the discretion of the Examiners. With the exception of the requirement that all candidates must satisfy the Examiners in Section *A*, the five Sections are treated alike, and the list of Honours (which is in three alphabetically arranged classes) depends on

the united results of them all. Those who are placed in the first class have attached to their names marks to shew (1) the subject or subjects for which the first class is given, and (2) the subjects, if any, in which they are specially distinguished.

It used to be the received opinion that Classical studies were little pursued or valued at Cambridge. That this has entirely ceased to be true is well known to all who understand the present condition of the Universities. The Classical Honour list is little shorter than the Mathematical; the University Scholarships, annually given for Classics, are contended for generally by seventy or eighty men; and numerous prizes are constantly given for compositions of various kinds in Latin and Greek, rewards far outnumbering those offered for Mathematical proficiency. No precedence is now given to Mathematics in any point. Classical Studies are now equally esteemed, and not much less practised, at Cambridge than Mathematical. As a place of Classical scholarship and training, Cambridge is fully equal to Oxford. In other words, an average first-class man of Cambridge is fully as well skilled in the Latin and Greek languages, as an average first-class man of Oxford; and there is as great a number of good scholars at Cambridge as at Oxford. This assertion is here made not as one which needs the support of evidence or argument, but as one which will be allowed at once by every well-informed Oxford

man, and will only be questioned by those who have not watched changes in the Universities. And it is made not in any spirit of rivalry to the sister University, but as a fact of the greatest practical importance to all persons desirous to find a market for their classical acquirements, and to save schoolmasters from the mistake, at once serious and ludicrous, of sending their inferior scholars to Cambridge, as a place where they are likely to find little competition. It should most decidedly be understood, that persons who wish to avoid competition, whether in Classics or Mathematics, had better not come to Cambridge.

The Honour Examination in Moral Sciences is divided into two Parts. Part I. consists of two papers on each of the following subjects: Psychology, including Ethical Psychology; Logic and Methodology; Political Economy; together with a paper of Essays. Part II. consists of papers on Ethical and Metaphysical Philosophy, Ethical and Political Philosophy, and the following special subjects: History of Philosophy, Advanced Logic and Methodology, Advanced Psychology and Psychophysics, Advanced Political Economy: it being understood that one or more of these papers may take the form of questions for Essays. Lists of authors and books are published, which are intended to mark the general course which the examination is to take in the several subjects. The names of the students who pass the examination with credit are placed according to merit in

three classes, marks of distinction being affixed to the names of those who have shewn eminent proficiency in particular subjects. The regulations as to the number of terms candidates must have kept are similar to those for the Classical Tripos.

The examination for the Natural Sciences Tripos is divided into two Parts, the requirements as to the standing of Candidates being similar to those for the Classical Tripos. In each Part of the Natural Sciences Tripos there are not only printed papers, but also, in some of the subjects, practical examinations, in writing or *vivâ voce* or both. The subjects included in the Examination are Chemistry, Physics, Mineralogy, Geology, Botany, Zoology and Comparative Anatomy, Human Anatomy, and Physiology. The papers in Part I. are of a comparatively elementary character. The names of those who pass either Part of the Examination with credit are placed in three classes, each class being arranged in alphabetical order. In arranging the Class List for the First Part, aggregate knowledge is taken into account. In arranging that for the Second Part, the Examiners are principally to regard proficiency in one or more of the following subjects: (1) Chemistry, (2) Physics, (3) Mineralogy, (4) Geology, (5) Botany, (6) Zoology and Comparative Anatomy, (7) Physiology, (8) Human Anatomy and Comparative Anatomy, (9) Human Anatomy and Physiology; in estimating proficiency in any one subject account is taken of

so much of the other subjects as is cognate with it, and no one is placed in the first class for proficiency in any one subject unless he shews a competent knowledge of some other subject; the subjects for knowledge of which a Candidate is placed in the first class are signified in the published list; and a distinguishing mark is placed opposite the names of those in the first class who have specially distinguished themselves either by general knowledge and ability, or by special proficiency in one or more of the subjects, in each case the ground upon which the distinguishing mark is appended being stated. In each Part it is provided that no credit is to be given to a student for any subject of which he shews less than a competent knowledge.

The Theological Tripos is in two Parts. Students may enter for the First Part or for both Parts at the end of their third year, and for the Second Part at the end of the fourth year. The First Part consists of papers on (1) Old Testament (general), (2) Genesis or some other book in Hebrew, (3) Historical Books in Hebrew, (4) New Testament (general), (5) the Gospels in Greek, (6) the remaining parts of the New Testament in Greek, (7) the history of the Church to the death of Leo the Great, with some one original work, (8) the history of Christian doctrine to the close of the Council of Chalcedon. The Second Part consists of Section I, Old Testament; (1) Isaiah in Hebrew, (2) selected parts of Poetical and

Prophetical Books in Hebrew and LXX, (3) Old Testament Hebrew and Composition. Section II, New Testament; (1) A selected Gospel (Greek) with some Patristic Commentary, and the Latin Versions, (2) A selected Epistle or Epistles (Greek) with some Patristic Commentary, and the Latin Versions, (3) The New Testament (Greek) generally, with Greek Composition. Section III, History and Literature; (1) Selections from the Apocrypha, the Apocryphal literature, Philo and Josephus, (2) Selected Greek and Latin Ecclesiastical writings, (3) A Historical Period between the death of Leo the Great and the taking of Constantinople, with selected illustrative documents, (4) A Historical Period between the taking of Constantinople and the present time, with selected illustrative documents. Section IV, Dogmatics and Liturgiology; (1) History and Development of a selected Doctrine, (2) Subject from Modern Theology in connexion with original documents, (3) The History of Christian Worship with special reference to selected ancient Liturgies and Service Books, and to the history and contents of the Book of Common Prayer, (4) An Essay on some Theological Question arising out of the subjects of the section.

The Law Tripos Examination is divided into two Parts. The First Part consists of papers on the following subjects:—

General Jurisprudence; History and General Principles of Roman Law; The Institutes of Gaius

and Justinian, with a selected portion of the Digest; English Constitutional Law and History; Public International Law; Essays and Problems.

The Second Part consists of papers on the following subjects:—

The English Law of Real and Personal Property and The English Law of Contract and Tort, with the Equitable principles applicable to these subjects; English Criminal Law and Procedure, and Evidence; Essays.

The names of those who deserve Honours are arranged in three classes in order of merit. The regulations as to standing are similar to those for the Classical Tripos.

The Historical Tripos is in one Part. Students enter at the end of their third year. The subjects are:—(1) The Constitutional History of England, 2 papers; (2) The Economic History of England, 1 paper; (3) Political Science, 1 paper; (4) Special Subject (I), 2 papers; (5) (a) Special Subject (II), 2 papers, or (b) Political Economy, 1 paper, General Theory of Law and Government, and the principles of International Law, 1 paper; (6) Subjects for Essays, 1 paper; (7) Subjects for Essays on English History, 1 paper. The paper on the Economic History of England includes questions involving some knowledge of Economic Theory. The paper on Political Science is composed of questions bearing on the inductive study of political institutions. A knowledge of the constitutions of Ancient Athens, Sparta, and Rome, as

well as of more modern constitutions, is required. In every year four Special Subjects are chosen, one being taken entirely or mainly from each of the following periods: I. B.C. 31—A.D. 800. II. A.D. 800—1453. III. A.D. 1453—1688. IV. A.D. 1688—1815. Of these subjects each candidate is required to select one for examination, those candidates who do not offer the alternative subjects under 5 (b) being required to select a second special subject. With each special subject one or more original authorities are specified, one of which, if possible, is in a foreign language; and questions are set dealing especially with these authorities. The subjects for Essays on English History are taken from such departments of English History as are not covered by the papers on the Constitutional and Economic History of England; no candidate is allowed to write on more than two of these subjects. The examination includes questions requiring a knowledge of Geography.

The Class List is arranged in three classes, the names in each class being in alphabetical order. Marks shewing distinction are affixed in cases of unusual excellence.

The Semitic Languages Tripos is in one Part. It is held in June, and students enter at the end of their third year or at the end of their fourth year. It extends over seven days. In Arabic, Hebrew (biblical and post-biblical), Syriac, and Biblical Chaldee, selected books and parts of books

are proposed as special subjects of examination; but in the first three of these languages translation from unspecified books and composition are also included. Papers are also set in the Comparative Grammar and the Literary History of the Semitic Languages with special reference to a list of books published from time to time. The names of those who gain honours are placed in three classes, in alphabetical order in each class. No student is to be placed in the first class who has not exhibited a competent knowledge of two of the three languages, Arabic, Hebrew, and Syriac, and also of the Comparative Grammar of the Semitic Languages.

The Indian Languages Tripos Examination is in one Part. It is held in June, and students enter at the end of their third year or of their fourth year. It extends over seven days. In Sanskrit, Persian, and Hindustani, selected books and parts of books are proposed as special subjects; but in each language translation from unspecified books and composition are included; and, besides papers on Sanskrit, Persian, and Arabic Grammar, the Comparative Grammar of the Indo-European languages is the subject of a separate paper. Finally, there is a paper on the History of the Indian Languages, Literature, and Philosophy. The names of those who gain Honours are placed in three classes, those in each class being arranged alphabetically.

The Regulations for the Mediæval and Modern

Languages Tripos (to come into full force in June 1894) are unlike those for other Triposes in one respect. Instead of being divided into two Parts, the Tripos consists in each year of six Sections, and a student may present himself in one year in some of these Sections and in another year in others. He thus divides the Tripos into two Parts according to his own choice. In other respects the regulations for standing &c. are similar to those for the Classical Tripos. Section A consists of papers on (1) Chaucer, (2) Shakespeare, (3) English authors not earlier than 1500, (4) English authors between 1200 and 1500, (5) writings in the Wessex dialect of Old English. Section B consists of papers on (1) English writings between 1100 and 1400, (2) Old English before 1100, (3) Anglo French, (4) Icelandic, (5) Wulfila and Gothic, (6) English grammar and Teutonic philology. Sections C and D deal similarly with French, including its relations with Spanish and Italian; and Sections E and F deal similarly with German, Old and Middle High German, Middle Low German, Old Saxon, and Wulfila and Gothic. Students who gain honours are placed in three classes, in alphabetical order in each class. In the case of the First Class, the List shews for what Section or Sections a student is placed in that Class, and also the Sections (if any) in which he has passed with special distinction.

It will have been seen that in most of the

Tripases a student can enter for a First Part at the end of his second year; and that if he passes the Examination at that early stage of his career, he must pass either a Second Part of that particular Tripos, or a Part of some other Tripos, or one of the Special Examinations, before he can proceed to his degree. Also, in the case of most of the Tripases, a student who has already passed a Part of a Tripos can enter a year later than one who presents himself for the first time. As much as can be done by regulation, is done, to induce students to enter for more than one Tripos. Men who are likely to take a very high place in Honours in one branch of study are usually advised not to risk the prospect of great University distinction, with its Collegiate rewards, by extending their reading into other fields to so large a degree as to enable them to take a really creditable place in a second competition for Honours in a fresh subject. But for all men it is well that the University should do all it can to save them from being one-sided; and to the average Honour-man it is on all accounts better that he should take a second Tripos, than that he should keep to his one branch, and by so doing get a few places higher in the list than he probably would have done if he had given a good share of time and thought to a second Tripos.

So much then of the examinations by which Degrees in Arts may be obtained. The Degrees in Law are obtained by graduation in the Law

Tripes. Graduates in the Law Tripes can proceed to the Degree of LL.B., or of B.A. ; or to both Degrees on payment of an additional fee.

Most of the Colleges in filling up vacant Fellowships are principally or entirely guided in the choice of men by the distinctions they have won in a Tripes. This is in many cases, not unnaturally, the one consideration which determines the course of reading a man shall pursue. But many men who do not aim at a Fellowship are glad to win some distinction in proceeding to their degree ; and however much the Pass Examinations may be improved, this laudable feeling, combined with the market-value of an Honour, will always ensure a large number of candidates for the Tripeses.

3. We have not yet exhausted the examinations held by the University. It adjudges a large number of Prizes, Scholarships, and Studentships, which have been founded by private munificence. Of University *Scholarships* and *Exhibitions* there are sixteen foundations, which are as follows :

Scholarships.

| | | | |
|-----------|---|--------------------------------------|---|
| Classics. | { | Craven ... six, value £80 per annum. | |
| | | Battie one, ,, £30 | „ |
| | | Browne one, ,, £21 | „ |
| | | Davies one, ,, £30 | „ |
| | | Pitt one, ,, £45 | „ |
| | | Porson one, ,, £70 | „ |
| | | Waddington one, ,, £90 | „ |

| | | |
|------------------------------|---|------------------------------------|
| Classics and Mathematics. | { | Bell ... eight, value £57 per ann. |
| | | Barnes one, ,, £60 ,, |
| | | Abbott two, ,, £60 ,, |

Hebrew. Tyrwhitt six, ,, £30, £20.

Theology. Crosse three, ,, £20.

International Law. Whewell, eight, value £100, £50, per annum.

History (especially Ecclesiastical). Lightfoot, three, value about £60 per annum.

Exhibitions.

Astronomy. Sheepshanks, one, value £50 per ann.

Geology. Harkness, one, about £97 for one year.

Of the Classical Scholarships one at least is adjudged every year, and as they are open to Undergraduates of every College and of no College, and most of them to Undergraduates of every year, there is a great gathering of Classical men to this contest. Even those who have little hope of winning the prize may distinguish themselves so much as to attract notice, and the rest are glad to accustom themselves to examination, and to see how much they can do. The regulations affecting these Scholarships differ in minor points, for which the *Calendar* or the *Ordinances* must be consulted. For the Porson Scholarship no student is eligible who has resided more than five terms.

It is commonly supposed that greater value is attached to brilliancy and elegance in the competition for the University Classical Scholarships than in the Classical Tripos. The examination is at the end of January.

Of the Bell Scholarships two are annually adjudged. They are confined to students in their first year; and to the sons of clergymen, unless none such present themselves. In case of equality the poorer candidate is preferred. The Scholar binds himself to take the degree of B.A. in the usual manner. The examination takes place about a month before Easter.

For the Thomas Barnes Scholarship candidates must be Undergraduates in the first year, and must have been educated on the Foundation of Christ's Hospital, St Paul's School, or the Merchant Taylors' School, in the City of London, and have come to the University from one of those Schools. In the absence of fit candidates with this qualification, other Undergraduates in their first year are to be admitted to the competition for that turn only. The examination takes place at the same time as that for the Bell Scholarships. The Scholar binds himself to take the B.A. degree in the most regular manner.

Candidates for the Abbott Scholarships must be Undergraduates in their first year (except when a premature vacancy is to be filled), and among them sons or orphans of Clergymen of the Church of England who stand in need of assistance to enable them to obtain the benefit of University Education are to be chosen, if there be any sufficiently deserving; if not, sons of Laymen, being Undergraduates who stand in need of assistance, may be chosen. Other things being equal, candidates born in the West Riding of the County of

York are to have the preference. The Examination takes place at the same time as that for the Bell and Barnes Scholarships. Neither of these Scholarships is tenable with a Bell Scholarship or with the Barnes Scholarship.

The Tyrwhitt Scholarships for Hebrew are open only to Graduates. The examination commences annually on the second Wednesday in May; persons intending to be candidates are to send in their names to the Vice-Chancellor on or before May 1st.

The Crosse Scholarships for Divinity are also confined to Graduates. The examination takes place annually after the division of the Michaelmas Term.

The Whewell Scholarships for International Law are open to all persons under twenty-five years of age. Every person elected is entitled, and, if not already a member of some College in Cambridge, is required, to become a member of Trinity College. Each Scholar must reside, unless he holds a diplomatic or consular appointment under the Crown, or have obtained express leave of non-residence from the Master and Seniors of Trinity College.

Candidates for the Lightfoot Scholarships, for History and more especially Ecclesiastical History, must have resided at least one year at the University, must be still in residence or have taken their first degree, and must be under 25 years of age. The Examination consists of three parts: (*a*) a selected portion of History, studied, as far as possible, from original sources; (*b*) subjects for

essays; (c) questions taken from or suggested by certain specified books. For details the *Ordinances* or the *Calendar* must be consulted. Besides the name of the successful candidate, the Examiners may make honourable mention of others.

The Sheepshanks Astronomical Exhibition binds the student who wins it to become a member of Trinity College. It is tenable for three years on condition of residence or permission obtained to be absent.

For the Harkness Scholarship candidates must have passed some final Examination for the B.A. degree, but must not be of more than three years' standing from the 19th of December following that final Examination. The election is in June of each year. The electors take such steps as they think necessary to ascertain the qualifications of the candidates.

The Studentships are a new and valuable feature in the encouragement given to mature study. They are now (1891) four in number, and are given to successful and promising students who undertake so long as they hold the Studentship to devote themselves to original study and research. They are not awarded by competitive Examinations. The Craven Studentship is founded from the accumulations of the Craven Fund, for advanced study or research, away from Cambridge, in the Languages, Literature, History, Archæology, or Art, of ancient Greece or Rome, or the Comparative Philology of the Indo-European languages;

its value is £200 a year; it is tenable for one year, but the student may be re-elected for a second year and for a third, so long as he is not of more than five years' standing from the completion of his first degree. The Balfour Studentship is founded in memory of Professor F. M. Balfour, for the furtherance of original research in Biology; its value is £200, or more; it is tenable for three years, and at the end of the first three years the student may be reappointed for another period of three years or less; the student need not be a member of the University. The John Lucas Walker Studentship was founded by the gentleman whose name it bears, who in 1886 empowered Sir Richard E. Webster, of Trinity College, Her Majesty's Attorney-General, to assign a sum of about £10,000 for the furtherance of the study of Pathology; its value is £200 a year, or, if the Managers please, any larger sum not exceeding £300; it is tenable for three years, and then for a further period of not more than two years; the student need not be a member of the University. The Prendergast Studentship is founded in memory of Mr Prendergast, of Trinity College, for the furtherance of study and research in the Greek Language, Literature, History, Philosophy, Archæology, and Art; its value is £200, tenable for one year; candidates must have passed some final examination for the B.A. degree, but not more than four years must have passed since the 19th of December following that final Examination.

The Prizes offered in the University for Latin and Greek Composition are the following :

The Chancellor's Classical Medals. Two gold medals, value fifteen guineas each, awarded each year to two students who are in their ninth, tenth, or eleventh term. The examination is early in the Lent Term in each year.

The Members' Latin Essay Prize, of thirty guineas, open annually for competition to all members of the University who are not of sufficient standing to be created Masters of Arts or Law, or who, being Students of Medicine, are of not more than seven years' standing from Matriculation. No student who has gained this prize can be elected again to the same. The subject is given out at the end of the Lent Term, and the exercises are to be sent in to the Vice-Chancellor on or before the tenth day of November.

Sir W. Browne's Medals. Three gold medals, value five guineas each, awarded annually to three Undergraduates in the following manner: the first for the best Greek Ode in imitation of Sappho, the second for the best Latin Ode in imitation of Horace, the third for the best Greek and Latin Epigrams, the former after the manner of the *Anthologia*, the latter after the model of Martial. The subjects are given out on or before June 15 in each year; the exercises are to be sent in on or before February 1. The Greek Ode is not to exceed twenty-five, nor the Latin Ode thirty stanzas.

The Porson Prize. One or more Greek books, annually awarded for the best translation into Greek Verse, made by a resident Undergraduate, of a proposed passage in any standard English poet. The exercises, distinctly written and accentuated, and accompanied by a literal Latin Prose version of the Greek, must be sent in to the Vice-Chancellor on or before February 1. If the passage be from a tragedy, the metre of the translation must be the ordinary Iambic Trimeter or Trochaic Tetrameter as used by the Greek Tragedians; if from a Comedy, the same metre as used by Aristophanes.

The Powis Medal. A gold medal, adjudged annually for the best poem not exceeding one hundred lines in Latin hexameter verse, written by an Undergraduate, who shall have resided on the day on which the exercises must be sent in, i.e. on February 1, not less than two terms, or who shall at least be then in the course of his second year of residence. This Medal was given annually by the late High Steward, Earl Powis. It is continued by the present Earl Powis.

These are for Classical Compositions. The Hare Prize is awarded for an English dissertation on a subject connected with the Classics, i.e. on a subject taken from ancient Greek or Roman History, political or literary, or from the history of Greek or Roman Philosophy. The candidates are to be Graduates of not more than ten years' standing from their first degree. The prize is adjudged once in four years. The subject is

announced in the Easter Term, and the Essays are required to be sent in during the Easter Term succeeding. The successful candidate receives about £55, and is required to print his essay.

For General Literature we have also the following :

The Harness Prize, adjudged once in three years to an Undergraduate, or Graduate of not more than three years' standing from his first degree, who shall compose the best English Essay upon some subject connected with Shakespearian literature. The subject is to be given out before the division of the Easter Term, and the exercises sent in on or before the 31st day of January next following. The prize is about £41, and the winner is to print his essay.

The Le Bas Prize, awarded annually for an English Essay on a subject of General Literature, such subject to be occasionally chosen with reference to the history, institutions, and probable destinies and prospects, of the Anglo-Indian Empire. The candidates must be Graduates of the University who are not of more than three years' standing from their first degree. The subject is announced in the first week of June and the essays are to be sent in to the Vice-Chancellor before the end of the next ensuing Lent Term. The successful essay is to be printed at the expense of the author, who receives about 50 guineas.

The Members' English Essay Prize, of the same value and given under the same conditions as

their Latin Essay Prize. The subject proposed for the English Essay must be one connected with British History or Literature.

For the encouragement of English Poetry we have the Chancellor's English Medal, a gold medal annually adjudged for the best English Ode or Poem in heroic verse, composed by a resident Undergraduate. The exercises are not to exceed 200 lines. The compositions by which this Prize, the Porson Prize, the Browne Medals, and the Powis Medal have been won, are recited in the Senate-House by their respective authors on a day appointed for the purpose. The subjects for all of these Prizes are given out on or before June 15, and the exercises are sent in before February 1 next following.

The Walsingham Medal is given by the present High Steward of the University, Lord Walsingham, for an Essay in Natural Science.

The Seatonian Prize, for the best English Poem on a sacred subject, is only open to Masters of Arts.

The Carus Greek Testament Prizes, two in number, each of the value of £10, are open, the one to all who are of sufficient standing to be inaugurated Bachelors in Arts, and who have passed the examinations for the degree of Bachelor in Arts, Law, Surgery, or Medicine, and are not of more than seven years' standing from matriculation; the other to all Undergraduates or Bachelors designate in Arts or Law, who are not of sufficient

standing to be admitted by inauguration to the degree of Bachelor in Arts or Law. The examination for each of the Prizes takes place on the Thursday after the 8th of November in each year. Each examination is concluded in a single day, two papers being set with translation and questions on the criticism and interpretation of the Greek Testament. No successful candidate can compete a second time for the same prize.

The Scholefield Prize is given each year to the student who in the Second Part of the Theological Tripos has shewn the best knowledge of the Greek Testament and Septuagint. It is of the value of about £13. 10s.

Dr Jeremie's Septuagint Prizes, two in number, are open for competition to all members of the University, who, having commenced residence, are not of more than three years' standing from their first degree. The examination is in the latter half of the Michaelmas Term and is concluded in one day. Special subjects for examination in each year are announced in the previous year, and are taken from the Old Testament in the Septuagint version, the Apocryphal books, the works of Philo and Josephus, and other Hellenistic writings. The examination is directed mainly, though not exclusively, to the selected books. It embraces translations and questions on the history, criticism, and interpretation of the books, on the relation of the Septuagint version to the Hebrew original, and on the fragments of the other Greek versions.

Each prize is half of the yearly product of a sum of £1000.

The Hebrew Prize is given as follows. Immediately after the Theological Tripos Examination, a paper is set to those candidates for Honours in the Second Part of the Theological Tripos who may wish to enter for it, but marks obtained in it are not taken into account in determining the places in the Tripos. This paper contains grammatical questions in Hebrew, and pieces for pointing and for translation into Hebrew. The best competitor in this paper who also gains a place in the first class in the Theological Tripos receives the Prize, which is of the value of about £13. 10s. Besides awarding the prize, the Examiners also publish a list of those candidates who have passed satisfactorily in Hebrew.

The Mason Hebrew Prize is given to the candidate for the Tyrwhitt Hebrew Scholarships who does best in Biblical Hebrew and Hebrew Composition. It is the interest on £800.

The George Williams Prize is given to the candidate for the Second Part of the Theological Tripos who does best in the papers on Doctrine and the Ancient Liturgies. It is the interest on £300.

The Evans Prize, being the proceeds of a capital sum of £300, is given annually to that student among the candidates for Honours in the Theological Tripos, who, being in the first class in the Tripos, is judged by the Examiners to stand first in the

papers on Ecclesiastical History and the Greek and Latin Fathers.

The Norrisian Prize is adjudged once in five years for the best Prose English Essay on a sacred subject. The subject is announced on or before December 31, and the exercises must be sent in to the Vice-Chancellor on or before the 31st of December following. The candidates are Graduates of not more than thirteen years' standing from admission to their first degree. The successful essay is printed and published at the expense of the author. The value of the prize is £55.

The Hulsean Prize, value about £75, is adjudged annually for the best English Dissertation on Christian Evidences written by a member of the University under the degree or standing of M.A. The subject is announced on New Year's Day, and the dissertations are to be sent in to the Vice-Chancellor, or to the Master of Trinity or St John's, in the ensuing October. The successful essay is to be printed at the expense of the author, and he cannot compete again.

The Kaye Prize, value about £55, is adjudged once in four years for the best English Dissertation upon some subject relating to ancient Ecclesiastical History, or the Canon of Scripture, or important points of Biblical Criticism. The competition is open to Graduates of not more than ten years' standing from their first degree. The subject is announced in December, and the exercises must be sent in on or before the 31st of the following

October. The successful essay is printed and published at the expense of the author.

The Maitland Prize is adjudged once in three years for the best Essay on some subject connected with Missions and the Propagation of the Gospel. It is open to Graduates of not more than ten years' standing from their first degree. The subject is announced in the Michaelmas Term, and exercises must be sent in on or before the 10th day of the following November. The successful competitor receives about £82. 10s., and pays the cost of printing, and distributes 150 copies according to the provisions of the Foundation.

The Burney Prize is awarded annually to a Graduate of the University who is not of more than three years' standing from admission to his first degree, for the best Essay "on some moral or metaphysical subject, on the Existence, Nature, and Attributes of God, or on the Truth and Evidence of the Christian Religion." The successful candidate receives about £96, and is required to print his essay.

The Winchester Reading Prizes, two in each year, value £15 each, are awarded to students who have resided not less than eight terms, nor more than fourteen, and have fulfilled certain other conditions, for the best reading in public of passages of English books some of which are announced beforehand. The English Bible and the Liturgy are always included in the special list of books from which passages may be chosen.

For Mathematics we have the following.

The Smith's Prizes, value about 20 guineas each, are adjudged annually for the best two essays on a subject or subjects in pure Mathematics or Mathematical Physics. The candidates are Bachelors of Arts who at the time of sending in their essays (the Christmas vacation) are of not more than one-and-a-half year's standing.

The Adams Prize, value about £150, is awarded every two years to the author of the best Essay on some subject of Pure Mathematics, Astronomy, or other branch of Natural Philosophy. It is open to all persons who have at any time been admitted to a degree in the University. The subject is announced in the Lent Term, and the essays are required to be sent in on or before the 16th day of December of the year next following. The Prize is awarded before the division of the following Easter Term. The successful author prints his essay at his own expense.

The Sedgwick Prize is given every third year for the best Essay on some subject in Geology or the kindred sciences. The course of proceedings is thus illustrated. In the Lent Term, 1892, the subject for the next Essay was given out; the exercises are to be sent in to the Registry on or before October 1st, 1894; the Prize is to be awarded in the Lent Term of 1895, and at the same time the subject for the next succeeding Essay is to be given out; and so on, every third year. Each candidate must be a Graduate of the

University and have resided sixty days during the twelve months ending at the time when the essay is sent in. The value of the prize is about £80.

For Political Economy, the Cobden Prize, of the value of £60, is offered triennially to be competed for by members of the University who are not of more than three years' standing from their first degree on the first day of the Easter Term of the Academical year in which the subject is announced.

A gold medal is given annually, by the Chancellor, for Legal Studies. The Examination is conducted by means of papers in the Second Part of the Law Tripos. It is open to students who have passed the examinations necessary for the Bachelor's degree in Arts or Law, and are not of sufficient standing to become Masters, and to all students of Medicine of not more than seven years' standing from matriculation, who have passed the examinations for the degree of Bachelor of Medicine. This Medal cannot be won twice by the same student. Changes in the Regulations of the examination for this Medal have lately been proposed.

The Yorke Prize, of about £95, is given annually for an Essay upon some subject relating to the "Law of Property, its Principles and History, in various Ages and Countries." Candidates are not to be of more than seven years' standing from their first degree. The subject for each Essay is announced before the end of November, and the exercises are sent in before the first of December of the year next but one succeeding.

The George Long Prize is given to the student in the First Part of the Law Tripos who is most distinguished in Roman Law and Jurisprudence. It is the interest on £500.

The Prince Consort Prize and the Thirlwall Prize are awarded each in alternate years, one in each year. They are open to Graduates of not more than four years' standing. The subjects are given out in the Easter Term of the year next but one preceding the award, and the essays are sent in on or before Oct. 31 of the year next after that in which the announcement is made. As the manner of awarding these two prizes is unique, it may be explained here. The adjudicators announce two or more subjects for dissertations, half the number of such subjects being chosen from the period of history before A.D. 800, and half from the period after A.D. 800, and also, if they think fit, one subject covering portions of both periods. The dissertations are either on one of the subjects so announced, or on some other subject of historical research selected by the candidate. In the latter case the subject must, at some time between the announcement of the subjects and the 15th of May in the following year, be communicated to the Regius Professor of Modern History for the approval of the adjudicators, who meet once in every term, if necessary, to approve or reject any subject so submitted to them; and their approval or rejection is communicated without delay to the candidate. The adjudicators declare which of the

dissertations, if any, are in their opinion deserving of publication, and the writers of such dissertations are the Prizemen, however many in number. They receive each a bronze medal, and their essays are published by the University, singly or in combination, in an uniform series, at the expense of the fund.

The reader has now before him a complete list of the rewards, pecuniary and tangible, which are bestowed by the University. He is not, however, to consider this synonymous with all the rewards which may be obtained at the University. These are very far more numerous; and in fact the above list does not include at all those prizes which tempt the majority of the more ambitious men to Cambridge. The Scholarships and Fellowships which are bestowed by the separate Colleges offer the principal attraction, and no one of the prizes enumerated above, though the honour of winning them is great because the competition is generally large, is in pecuniary value at all equal to an ordinary Fellowship. We have also at length completed our account of the University as an examining body, for it will not be necessary here to speak of the Local Examinations for persons not members of the University, boys, girls, men, and women. By these Local Examinations, in three stages; by its participation in a Joint Board for examining Highest Grade Schools and for giving Certificates on examination to boys of the usual age for leaving such schools; by holding examinations and giving

certificates in State Medicine, and in the Art of Teaching; and, not least, by establishing connected courses of lectures and examinations in many populous towns, the University endeavours to extend to other parts of the kingdom that supervision which it exercises over the studies of its own members. It is to be observed that within its own limits the University does this work of testing the knowledge gained by its students, and setting up in the papers of its authorized examiners a standard of the knowledge required, far more completely than it fulfils the task of giving instruction. The work of instruction, which belonged originally to the University alone, has in recent times, though with little formal change, been practically shared with it by the Colleges, which have however been both disposed and obliged by interest to conform to the standards of knowledge set up by the University in its examinations. For some years past there has been a marked tendency to combination among Colleges in the work of giving instruction, especially in the subjects of Honour examinations, for which each College separately might have insufficient classes. The large multiplication of University examinations had thus caused something approaching to a revival of University instruction, before the Commission of 1887—90 began its labours. The result of the work of that Commission has been very largely to increase the amount of teaching conducted by the University. New Professorships.

have been established. A considerable number of Readers—a grade of teacher ranking next after and near to the Professors—have been appointed; and a large number of University Lecturers have been chosen, chiefly from among College lecturers. There is now a very complete system of teaching for all the subjects which are included in Tripos Examinations.

4. We proceed to speak of the University as conferring Degrees. And here it will be convenient to recapitulate the conditions upon which degrees are conferred. These are, first, to have resided a certain number of terms, in other words, to have had one's name on the boards of a College or on the register of Non-Collegiate students for such a time, and to have actually occupied, during at least three-fourths of each term for such a time, either rooms in a College, or authorized lodgings or houses in the town. Residence may be legally counted in the house of the student's parent without special permission. The number of terms required alike in Arts, Law, and Medicine, is nine. Illness is a valid excuse for the non-performance of this condition, provided that a medical certificate be produced, signed by an M.D. or surgeon, expressly testifying that during a time specified, which must be long enough to have prevented the keeping of the term, the student could not with safety, on account of his health, return to Cambridge. It is however the practice to grant

the remission of not more terms than one, and that only after the actual commencement of residence. A similar discretion is exercised in remitting a term which a student has failed to keep owing to any other urgent cause, distinctly stated in a proper certificate. The next condition, also common to the three Faculties, is that the student shall have passed the Previous Examination, or some Examination accepted in lieu of the Previous Examination. Thirdly, for a degree in Arts, the student either must have passed one at least of the Honour Examinations, in Mathematics, in Classics, in the Moral Sciences, in the Natural Sciences, in Law, in History, in Theology, in the Semitic Languages, in the Indian Languages, or in the Modern and Mediæval Languages, or he is required to have passed (1) the General Examination for the Ordinary Degree, and (2) a Special Examination, in Theology, Moral Science, Law, History, Natural Science, Mechanism and Applied Science, Music, Modern Languages, Mathematics, Classics. For a degree in Law, the Law Tripos Examination. For a degree in Medicine, three Examinations, each in two Parts; the first after passing the Previous Examination; the second after passing the First Examination and completing two years of Medical Study; the third after passing the Second Examination and completing the course of Medical Study, which ordinarily requires five years for its completion. It is to be understood however that of the five

years only a sufficient part to cover nine terms is required to be passed in the University. During any part of the time not passed in the University, the student must attend some School of Medicine recognized by the Board of Medical Studies. In the case of a student who obtains Honours in the Mathematical, Classical, Moral Sciences, or Natural Sciences Tripos, four years of Medical Study suffice.

Proper days for admission to the degree of B.A. of those who have obtained Honours in the several Triposes and of those who have passed the examinations for the Ordinary B.A. degree are fixed by Regulation. Those who are admitted at any Congregation not fixed as proper for them by these Regulations pay a higher fee for the degree. The principal days of General Admission to the B.A. Degree at present are towards the end of the Easter Term and of the Michaelmas Term.

It is of little practical importance to the student to know the forms observed in conferring degrees. It is sufficient to say that a College Officer called the Prælector or Father of the College presents on behalf of each candidate a paper signed and sealed by the Master of the College, certifying that the candidate has resided the required number of terms, or has obtained permission from the Council of the Senate under special circumstances to count one term as kept which has not been kept; and another paper called the Supplicat, signed by the Prælector himself on the part of the

College, and containing a request that the degree may be granted. In the case of a Non-Collegiate Student, the Censor acts as Prælector, and the Chairman of the Non-Collegiate Students' Board takes the place of the Master of the College. The Supplicat is first submitted to the Council of the Senate, and then to the Senate itself, on which the candidate, after being led up by the Prælector and presented to the Vice-Chancellor, kneels down before him, and receives admission in a solemn form of words. This ceremony, however, only constitutes the candidate a Bachelor Designate; there remains the further ceremony of Inauguration, which takes place on December 19 or 18. On this occasion the whole list of Bachelors Designate in Arts and Law is read out, their presence not being required, and they are then pronounced by the Senior Proctor to be full Bachelors. The amount of the fees required on taking the degree will be found under the head of University and College expenses.

5. The University maintains discipline among its students, i.e. among all its members *in statu pupillari*, or below the degree of Master in some faculty, by the means of Proctors. These officers are two in number, annually elected, Masters of Arts or Laws, of three years' standing at the least, or Bachelors of Divinity. It is part of their duty to keep watch over the behaviour of the Students, and, to assist them in this, four Pro-proctors are

annually appointed. They inflict fines on those students whom they find abroad after dark without cap and gown, and for graver offences they can inflict graver penalties. They are attended by servants, who act as a kind of University Police. Every Undergraduate or Bachelor is bound to state to the Proctor or Pro-proctor, when called upon, his name and College, and if any other member of the Senate calls upon him to do the same, he is equally bound to do it. The penalties inflicted at Cambridge are fines, confinement within the lodging-house or within the walls of the College in the evening, rustication (dismissal from the University for one or more terms or part of a term, which of course entails a prolongation of the time of undergraduateship), and expulsion from the University.

There are several public institutions belonging to the University, into which the members of the University have the privilege of admission. These are:—(1) The Library, in which Undergraduates wearing Academical dress are allowed to study, every week day except Saturday, from 1 to 4 P.M., and from which resident Bachelors may obtain, through the Tutor or Censor, the loan of books to the number of five volumes at a time, while any one above the degree of Bachelor may borrow on his own account as many as ten volumes. Under exceptional circumstances Undergraduates may obtain access to the Library for purposes of study during the earlier hours of the day on the re-

commendation of the College Tutor or the Censor. (2) The Fitzwilliam Museum, into which the public generally are admitted on five days in each week, in summer from ten to six and in winter from ten to four, and all Members of the University, and friends accompanying them, daily during the same hours. But into the Library connected with it, which is closed at four throughout the year, an Undergraduate can only be admitted on presenting a ticket signed by himself and countersigned by the Tutor or Censor. (3) The Observatory, open to all members of the University and friends with them every week day between half-past twelve and half-past one. (4) The Geological Museum. (5) The Museum of Zoology and Comparative Anatomy.

The Cavendish Physical Laboratory is furnished with admirable apparatus, and many of the Laboratories and other buildings at the New Museums are well worth a visit, even if the student is not concerned with Natural Science. The Botanic Garden is of great interest, and is well maintained at the cost of the University.

The relation of the Student to the University has now been described with sufficient clearness, perhaps, to render the articles which are to follow intelligible, and in such a manner as to fill any gaps they may leave. No attempt has been made to describe completely the constitution of the University; such a description would not only occupy much space and be difficult to understand,

but it would also comprise much which is of no practical importance to the Student. He is mainly concerned with his College, or if he be a Non-Collegiate Student, with the Board to which the University entrusts the supervision of such Students; it is only at rare intervals that he comes in contact with the University itself, and it has been these points of contact only which we have endeavoured to indicate. It may be as well to add a few words about the Colleges and the ordinary routine of College life.

The Colleges are foundations established and endowed at different times by private munificence or royal grants to secure a studious leisure to learned men and education to the young. They are of later date than the University itself, the foundation of the earliest College having taken place rather more than 600 years ago, but they have in process of time grown into an intimate union with it. So completely has this been the case, that for a considerable time it was impossible to be a student of the University without being a member of some College. This restriction was removed first by a statute permitting the establishment of Hostels, and again by a statute sanctioning and regulating the admission of Non-Collegiate Students. At present every Undergraduate is admitted either as a member of some College, or as a Non-Collegiate Student. The Colleges are seventeen in number, and differ from each other in many details. The differences are described

elsewhere; the present is the place for a description of whatever the student may require to know that is common to all the Colleges.

Every College has a Head, who is generally called Master, in one case Provost, and in one case President. The student has few personal dealings with him, except of a social character. He performs the ceremony of admission to scholarships and fellowships, and grave cases of misconduct are referred to him. Then come the body of Fellows, out of whom and by whom the Master is in most cases chosen. These are graduates of the University in receipt of annuities arising from the benefactions of founders, and in possession of other privileges defined by statutes. Vacancies among the Fellows are filled up by election, either by the body itself, or by the senior members of it, and generally from the graduates of the College. In some of the smaller Colleges the practice prevails of taking graduates from without, when none of their own students are men of sufficiently high degree, or distinguished in the particular branch of study which the new Fellow will have to undertake. In some Colleges the merits of the Candidates are tested by Examination; but in most, the University Honours they have won are taken as a sufficient test. The value of the Fellowship, or annuity of a Fellow, is commonly between £200 and £250 a year. Conditions are attached to the holding of Fellowships which vary in the different Colleges and even in different

Fellowships in the same College. Restrictions imposed by the will of the several founders have been relaxed or removed within the last few years; religious tests have been removed, and there is now in general no difference in the conditions of tenure for Lay Fellows and for Fellows in Holy Orders. Every College has the presentation to a certain number of livings, which they are bound to offer to Fellows or late Fellows, Scholars or late Scholars, Chaplains or late Chaplains, of the College, the real or supposed right of Fellows to take livings in order of seniority being now at an end.

The Fellows with the Master constitute the governing body in most Colleges, though in some the government is in the hands of a portion of this body. The principal educational authority in the College is the Tutor. There is one or more of such officers in every College, and in addition to the duty of lecturing in the College, which he commonly shares with others, the Tutor exercises control over all within the College who are *in statu pupillari*. The Tutor is generally a Fellow, and to aid in the work of instruction other Fellows or other graduates are generally appointed with the title of Assistant Tutors or Lecturers. Besides holding authority, the Tutor acts *in loco parentis* as guardian and adviser to the Undergraduates, and it is to him that the student should go in any difficulty that may arise.

Besides the Tutors, Deans are appointed,

usually from among the Fellows, who are charged to provide for the celebration of Divine Service daily in the College Chapel, and in some cases to enforce the attendance of the students. The Deans also share with the Tutors the general supervision of the conduct of the students, especially in taking care that proper hours are observed for returning home at night.

The Undergraduates of a College may be divided into the classes of Scholars, Pensioners, Fellow-Commoners, and Sizar. Noblemen may enter as a separate class, but few, if any, do so; and the class of Fellow-Commoners is no longer an important one.

The Scholars are students who receive an annuity from the College and enjoy besides certain exemptions varying at the different Colleges. Scholarships are given in reward of merit, and it is the first ambition of a student to win this distinction. They may be won by members of the College at the end of the first academic year, or later. The Colleges also offer a certain number of Scholarships annually to be competed for by those who are not yet members of the University. These are called Entrance or Minor Scholarships, and are either continued on good behaviour throughout the Undergraduate's career, or are stepping-stones to the ordinary and more valuable Scholarships of the College. The parent who is not in a condition to pay the whole expense of a College education for his son may thus be spared

the anxiety which would otherwise be entailed on him, lest after the boy had begun his residence he should fail to gain a Scholarship. Scholarships are of various values, some of £30 a year, others rising as high as £70, £80, and even £100 per annum.

The ordinary student of a College, who pays for everything, and enjoys no exemptions, is called a *Pensioner*, i.e. a boarder. *Sizarships* consist of certain emoluments and exemptions given to students in consideration of poverty as well as merit. Some of the *Sizarships* at Trinity and St John's are of considerable value. The *Sizar* used to occupy a position of inferiority, as one avowedly poor in the company of richer men. In these better days, a man is taken at his own worth, irrespective of his circumstances, and the very avowal of his poverty secures him from many temptations.

Men of fortune, when they are past the ordinary age of Undergraduates, and still more when they are married men, may find it convenient to enter themselves as Fellow-Commoners. In this character they pay higher fees, and, in return, are either admitted to associate on equal terms with the Fellows of the College, and to dine at the Fellows' table in Hall, or are allowed more freedom than is granted to the Pensioners who are of the ordinary age.

The duties commonly exacted by a College from its students are attendance at Chapel, at lectures,

and at the dinner in the College Hall, and to be in College or in their lodgings at a reasonable hour each night. In some Colleges the rules about attendance at Chapel have been relaxed, or exceptions have been readily allowed, so that it is not possible to make a general statement of the amount of attendance required. The morning service on week-days begins commonly at half-past seven or eight o'clock, and so constitutes an ordeal by which the steadiness of a man's character and industry may be tested. The less regular and resolute prefer the evening service, the time of which varies considerably in different Colleges and at different seasons of the year. Those who do not attend Chapel with fair regularity receive warnings from the Dean, and after repeated warning are in danger of punishment, such as being confined to gates, i.e. being deprived of the liberty of passing the College gates or the outer door of the lodgings during some hours before they are closed for the rest of the students. At most Colleges it is the duty of the Scholars in turn to read the lessons in Chapel, two Scholars being appointed for each week.

Lectures lasting an hour each are delivered daily in most Colleges between the hours of 9 A.M. and 12. As the students are in various stages of advancement, and engaged in various studies, they are divided into a number of classes, and it is not to be supposed that each student is engaged at lecture during three hours every day.

Perhaps two hours a day for five days in the week may be the average time exacted of a first-year student by the lecturers. Nor is it to be imagined that by a lecture is meant a formal and continuous discourse delivered by the lecturer. A College lecture at Cambridge is often much the same thing as a lesson at school. If the subject be classical, and the class not an advanced one, an author is read, the students translating in turns, while the lecturer interposes his comments as he sees fit. If it be mathematical, the students are often occupied during the whole hour in writing answers to written questions, or in solving problems. When the audience is large, the lecture often becomes more formal in character. The College lecture is now for the most part more real work than it was some years ago, and, in some Colleges at least, great pains is taken to induce the men to work, and to test their progress.

For some years past efforts have been made by the Colleges to obviate for a large number of their students the need of private tuition, which had become a recognized necessity for any man who hoped to take a fair degree and for a large number of mere pass-men. By subdivision of classes where they were inconveniently large, and by combination of classes between several Colleges where they were inconveniently small, College instruction has been made much more efficient. A classical student should not generally need private tuition, if composition lectures as well as lectures on books be

open to him in his own or associated Colleges. In some branches of Mathematics, and in Moral Science and History, attempts have been made to substitute series of examination papers set by the lecturers for the drill of a private tutor; and there is a general desire shewn to make use of any conspicuous ability for teaching in such a way as to give it the fullest effect. The increase and graduation of University instruction has aided the endeavour to lessen the demand for private tuition. But it still remains a fact that men ambitious of a degree within Fellowship range resort to the assistance of private tutors, some of whom are men of the highest ability; and a large number of ill-prepared or indolent pass-men put themselves into the hands of men who have made private tuition for persons of this mental calibre a science.

There is dinner in the hall of every College every day in term time. In the larger Colleges a choice of hours is offered, and in the Easter Term most Colleges adopt an earlier hour than usual for at least one daily dinner. A sufficient notice of the dinner will be found in the paper on College Expenses. Grace before meat is read commonly by the Scholars, and after meat by Scholars or by the senior Fellow present.

Few men in Colleges study between 2 P.M. and 4 or 5 P.M. in winter, or during the earlier hours of the evening in summer. So much time as this is given by even the most industrious to open-air exercise and recreation. The students are English

youths, and a large proportion of them have grown up in the great public schools. Athletic sports accordingly are pursued with ardour. In the boat-clubs of the several Colleges the science of rowing is studied by many men with as much ambition, and perhaps even with as much seriousness, as are shewn in the study of the subjects of the Honour Triposes¹. The Riflemen of Cambridge University have not been undistinguished. In the spring term, Lawn Tennis is everywhere prevalent, while Fenner's Ground and the separate Grounds of many College Clubs are alive with Cricket or Athletic Sports; the annual boat-race at Putney and the match at Lord's between the Universities are known to the public. More intellectual recreations are also to be procured. There is the Union Debating Club, with reading room and library attached, Musical Societies, especially a very powerful one known as the University Musical Society, Shakespeare Clubs, &c. &c. Hardly less numerous are the organizations for religious purposes. Out of all these materials the reader must form as vivid a picture as he can of life at Cambridge.

¹ Boatmen may let the lighter kind of boats only to those who sign a statement that they can swim. The river above Cambridge is deep and dangerous, and the lower part is also dangerous when flooded. Students should assist in maintaining this necessary rule.

UNIVERSITY AND COLLEGE EXPENSES.



BEFORE entering upon this head it must be pre-^{*} mised that it is only a small part of the expense of a University education which arises from the ordinary fees or payments of a Student.

College arrangements are so framed as to admit of the Undergraduates living together in the same way, and dining at a common table, but so as to allow a considerable discretion to each in fixing his own scale of expenditure and style of living. This is rendered necessary by the various circumstances of the several students, and any attempts to enforce economy or uniformity by strict sumptuary rules would be found as obnoxious to parents as to the students themselves. They would be at variance with the principle that, inasmuch as students come to the University to learn among other things to exercise responsibility and self-guidance, they must be dealt with on the suppo-

sition that they may safely be trusted with considerable independence.

The social usages of the place also leave each individual much at liberty to live as he chooses. Persons whose means and scale of expenditure are very different mix together on terms of perfect equality, and in the University more than almost anywhere else an individual passes for what he is worth in himself.

Owing to this variety in the style and expense of living, only a general idea can be given of what is necessary or usual, and parents must form their own estimate for the particular case from their knowledge of the tastes and disposition of their son, and of the style and comfort to which he has been used and to which he will consider himself entitled.

Wilful extravagance is not a general failing of Undergraduates; the cases of it that occur are few in proportion to the whole number of the students, but an extravagant man is always a conspicuous man, and thus a very small number of such cases gives an impression of the general expensiveness of the University which is not well founded.

As a general rule, the more a young man is on terms of confidence with his parents on money matters, and feels that he is dealt with as liberally as is fair with regard to other claims, the less likely he is to spend more than he ought to do; nevertheless, a well-meaning young man who has never had to manage for himself, and who while

at home or at school has seldom had to deny himself any reasonable gratification, may find his bills at the end of a term much higher than he expects. He may not have carried in his mind an approximate account of his expenditure, and perhaps has not asked the price of what he has ordered. In such a case, it is unwise for a parent to shew such displeasure as is likely to deter his son from again confiding to him the full extent of his liabilities. The more kindly a well-disposed and sensible young man is treated, the more careful he will be, and the more anxious to shew that he can control his expenses. If no improvement take place, the fault must be laid, not to inexperience, but in some cases to helplessness and thoughtlessness, and it will be a question whether he have strength to change the style of living he has taken up, and whether a longer stay at the University is likely to be worth the cost. What Dr Arnold said of a public school is still more true of the Universities, viz. that a certain power of self-government is presupposed in all who come to them, and that those who have it not are out of place in such societies.

Besides those who drift into difficulties from thoughtlessness, which gradually grows into selfishness, there are some of a worse description. There is always a certain proportion of the young men of the country utterly unable to take care of themselves, and with whom recklessness in money matters amounts to positive disease ; these, whether

at the University or elsewhere, are likely to go to ruin. The Examinations and discipline in a great degree deter this class of persons from coming to the University, but a case of this kind occurs now and then. The College authorities will under such circumstances in general recommend immediate removal; and parents are advised to act on their representations before the evil has become very serious.

It must be understood in what follows that, when nothing is mentioned to the contrary, the expenses spoken of are those of a Pensioner¹. There are but few Fellow-Commoners now in the University; these are mostly persons above the usual age or married men, and no estimate can be given of their *actual* expenses. The necessary expenses of a Fellow-Commoner for tuition, commons (i.e. board), and College payments, exceed those of a Pensioner by a sum varying at different Colleges from £24 to £50 a year. Sizar generally get some assistance from the College endowments, the particulars of which may be learnt on application to the Tutors; but in most cases a Sizar pays only £6 a year for his College tuition, whereas a Pensioner pays £21; hence the expenses of a Sizar will be at least £15 a year less than those of a Pensioner, and he also saves a small sum in the quarterly payments to the College.

¹ Pensioner means a person who *pays* (*pendo*) for the board and instruction he receives, while a scholar or exhibitioner is assisted by the foundation.

Besides the annual expenditure of a student there is a certain outlay necessary in order to proceed to a Degree, the items of which are as follows :

CAUTION MONEY.

As a partial security against bad debts, the Tutor receives "Caution Money" on the admission of a student: this is the same at most Colleges, and is as follows :

| | |
|---|-----|
| For Noblemen specially entered as such ¹ ... | £50 |
| Fellow-Commoners | 25 |
| Pensioners | 15 |
| Sizars (generally)..... | 10 |

The Caution Money remains in the hands of the Tutor, and is not returned till a person takes his name off the boards, or becomes a Compounder, i.e. pays after his Degree a sum, usually £25, to the College to retain his name on the boards for life, free of all annual charges.

ADMISSION FEES.

In addition to the Caution Money, students, on admission, or coming into residence, usually have to make a payment to the College, which is not returned. The extreme amount is £5; it is more frequently £3, and at some Colleges there is no such charge.

¹ The classes of Noblemen as a distinct order, and of Fellow-Commoners, have nearly disappeared.

MATRICULATION FEES.

The Matriculation fees to the University Chest are as follows :

| | £ | s. | d. |
|--------------------------|----|----|----|
| Noblemen | 15 | 10 | 0 |
| Fellow-Commoners | 10 | 10 | 0 |
| All other Students | 5 | 0 | 0 |

These fees are in some Colleges paid to the Tutor's account at his Banker's before the Matriculation takes place, in others they are charged in the College bill.

FEES AT THE PREVIOUS, GENERAL AND FINAL EXAMINATIONS.

Before admission to each part of the Previous Examination every Candidate is required to pay the sum of 25 shillings to the University Chest; such sum not to be returned to the Candidate in case of his not being approved by the Examiners. A person who fails has to pay a fresh fee when he presents himself again. The sum of £1 has to be paid by each Candidate presenting himself for each part of the General Examination and 30 shillings by every one presenting himself for each part of a *Special* Examination, that is, the final Examination in a particular branch of Study for a pass Degree. The present fee of £2. 2s. for the Examination for a Degree in Honours will be raised in 1893 to £3. Candidates for Honours

have to pass an Examination in the Additional Subjects of the Previous, but do not enter for the General Examination.

FEES FOR DEGREES.

Each member of a College who takes his Degree pays a fee to the University, a fee to the College, and, in most cases, a fee to a College officer called the Prælector, who prepares the certificates, &c. of each Candidate, and presents him for his Degree. A list of the University fees for the different Degrees is given below. The College fees for the B.A. Degree vary from £1. 1s. to £5. 9s. 6*d.*, and the fee to the Prælector is often £1. 1s.

Persons proceeding to Degrees in Medicine must also attend lectures in that Faculty, for which fees have to be paid to the Professors. Particulars are given in the article on Medical Study and Degrees.

TABLE OF FEES.

| | £ | s. | d. |
|--|----|----|----|
| (a) On admission to the degree of B.A. or LL.B. at the time or times of general admission | 7 | 0 | 0 |
| (b) On admission to the degree of B.A. or LL.B. at any other time | 10 | 10 | 0 |
| (c) On admission to the degree of M.A. or LL.M., whether the Candidate be a Fellow of a College or not | 12 | 0 | 0 |

| | | | | |
|-----|--|----|---|---|
| (d) | On admission to the degree of M.B ... | 8 | 0 | 0 |
| (e) | On admission to the degree of M.B. when the Candidate is a Bachelor of Arts or Bachelor of Laws | 2 | 0 | 0 |
| (f) | On admission to the degree of Mus. B. | 5 | 0 | 0 |
| (g) | On admission to the degree of M.D., whether the Candidate be a Bachelor of Medicine or a Master of Arts..... | 20 | 0 | 0 |
| | On admission to the degree of M.C., (Master in Surgery) | 8 | 0 | 0 |
| (h) | On admission to the degree of Mus. D., when the Candidate is Mus. B..... | 10 | 0 | 0 |
| (i) | Doctors in all other Faculties | 20 | 0 | 0 |

FURNITURE, &c.

This item of course varies considerably. If a Student goes into lodgings he has to provide house linen, crockery, glass, and some articles of hardware, as only actual furniture is found in the University lodging-houses.

Linen (sheets, pillow-cases, towels, and breakfast cloths) is generally brought from home by the Student; the cost of the other articles usually ranges from £4 to £12. Sometimes the keepers of the lodging-houses, or in College the bedmakers, will supply a second-hand set of crockery, &c. at a cheap rate.

If the Student takes rooms in College he will generally have to buy furniture. A valuation of the articles left by the outgoing tenant will be

given to him, and of these he may take what he likes. The amount will be usually charged in his first College bill. In some Colleges the fixtures, paint and paper are the property of the tenant, and are taken by the new comer at a valuation. In some cases the fixtures, &c. are the property of the College, and no extra charge is made.

When a Freshman has to furnish rooms in College it is desirable that he should be assisted by a parent or friend. The expenditure under this head of course varies very widely. It is usually the cheapest plan to take as much of the furniture left in the rooms as is serviceable; the lowest price at which a student can get into any rooms may be put at £15. In the majority of cases the expense ranges from £30 to £40, but to furnish large rooms handsomely will cost considerably more.

About half of this outlay may be expected to be recovered. The better the furniture the larger will be the proportion got back upon leaving.

The furniture left by a student, if rejected by the incoming tenant, is generally taken by the College appraiser, at a reduction of 2s. 6d. in the £1.

The cost of a cap, gown, and surplice, also comes under the head of original outlay. It ranges from about £2. 10s. to £5; the gowns at the different Colleges vary in pattern and price.

SUMMARY OF OUTLAY.

The following is a summary of the outlay and payments requisite for obtaining a degree, independently of the annual expenditure :

| | Lowest Possible cost | | Average | | Higher estimate | |
|---|----------------------|----|---------|----|-----------------|----|
| | £ | s. | £ | s. | £ | s. |
| Admission Fee | 0 | 0 | 3 | 0 | 5 | 0 |
| Matriculation Fee | 5 | 0 | 5 | 0 | 5 | 0 |
| Previous Examination Fees | 2 | 10 | 2 | 10 | 3 | 15 |
| General Examination Fees... | 2 | 0 | 2 | 0 | 2 | 0 |
| Degree Examination Fees ... | 2 | 2 | 3 | 0 | 3 | 0 |
| Degree Fee | 7 | 0 | 7 | 0 | 7 | 0 |
| <i>Outfit.</i> | | | | | | |
| Cap, gown, and surplice..... | 2 | 10 | 4 | 0 | 5 | 0 |
| Outfit, Crockery, &c. | 4 | 0 | 7 | 0 | 11 | 0 |
| Furniture (half the cost as representing the ultimate loss) | 10 | 0 | 16 | 0 | 25 | 0 |
| | <hr/> | | <hr/> | | <hr/> | |
| | 35 | 2 | 49 | 10 | 66 | 15 |
| | <hr/> | | <hr/> | | <hr/> | |

The last item does not occur if the Student goes into Lodgings.

It is a good plan to pay *in cash* for the outfit of a Student in crockery, cap and gown, &c. Discount is then got, and open running accounts with tradesmen are avoided.

The friends of a Student will be further out of pocket during his career by the Caution Money which will remain in the hands of the Tutor as long as the Student's name is on the boards, and by the half of the cost of the furniture which is expected to be eventually recovered.

From the time when a Student's name is entered on the boards of the College, he is charged a small sum quarterly, which includes payments to the University Library, and other charges levied *per capita*. No charge is made for Tuition until the Student has come into residence, but if the name of a Student is placed on the boards of a College and is removed without his ever coming into residence, £2 has in some cases to be paid to the Tuition fund for the quarter in which his name was placed on the College boards, and 10s. for each succeeding quarter.

ANNUAL EXPENDITURE.

We now come to the Annual Expenditure, and before proceeding to particulars, we must refer to the efforts recently made in the University to keep within certain definite limits a Student's College expenses.

In several Colleges and 'Public Hostels' a fixed charge of about eighty guineas a year is made which covers the whole cost of board, residence and ordinary tuition. Economies have been also effected in some Colleges by arrangements under which the Students breakfast and lunch together. But such arrangements are far from general, and we will now consider the details of the usual College account.

TUITION.

The terminal payments for College Tuition of persons *in statu pupillari* are usually as follows :

| | £ | s. | d. |
|-----------------------------|----|----|----|
| Noblemen | 13 | 6 | 8 |
| Fellow-Commoner | 10 | 0 | 0 |
| Pensioner | 7 | 0 | 0 |
| Sizar..... | 2 | 0 | 0 |
| Bachelor Fellow-Commoner... | 2 | 10 | 0 |
| Bachelor of Arts | 1 | 10 | 0 |

No payment for Tuition is required from non-resident Bachelors. In the case of a Bachelor attending special College Lectures, additional fees may be charged.

Undergraduates are not charged the Tuition fee if they do not reside at all during the Term. If they reside for a short time or come up for Examination they are charged a portion of the fee.

ROOM RENT.

This is the head under which there is most difference of expense in the different Colleges. In some Colleges it ranges from £4 to £10, in others from £12 to £30. At some Colleges this charge includes the items of fixtures, paint, &c.; at others these items are charged separately. When particular information is required, it is best to apply to the College Tutor.

LODGINGS.

The rent of lodgings varies from £5 to £19 a term, for the ordinary accommodation of two rooms. It is fixed by an University Inspector of Lodgings. The price depends to a great degree on situation; rooms which are near those Colleges which have the most Students in lodgings fetch the highest rents.

An Undergraduate cannot be obliged to take rooms for more than one Term. If he intend to change he should give notice at the end of the term, and if possible two or three weeks sooner. Rooms cannot be taken or changed unless the College Tutor sign a written permission. A Freshman should ask the College Tutor to take rooms for him, and state the price he is prepared to give. The Rent is supposed to include attendance, but the servant generally expects some small gratuity at the end of Term. For the Regulations with respect to University Lodgings see the Compendium of University Rules given to each Student on admission to reside.

BOARD.

The daily charge for dinner in Hall was regulated by the price of meat, and about equals the cost price of $1\frac{1}{2}$ to 2 lbs. of meat, with vegetables, pastry, and sometimes soup or fish, &c. It varies

at different Colleges, and may be said to range from 1s. 10*d.* to 2s. 6*d.* a day. What in some Colleges forms part of the regular dinner is elsewhere paid for as extra. It is convenient for those who desire to live as economically as they can, to have the *necessary* cost of the dinner as low as possible; but if the style and comfort of the dinner in Hall is not such as to satisfy the bulk of the Students, they will be more apt to dine elsewhere, which, besides being otherwise objectionable, entails additional expense.

Bread, butter, beer and cheese, are supplied from the College butteries; and in many cases, milk, tea and coffee ready made, mineral waters, &c. are to be had also. If an Undergraduate gives no express orders, his bedmaker, if he be in College, or the servant of his lodgings, will fetch him the usual allowance of bread, butter, and milk for breakfast and tea; this is called his "commons;" if he wish for more or less, he must give orders accordingly. He is not bound to have more than he wishes, and may, with permission, supply himself from the town if he thinks fit.

Each resident member of a College receives weekly two accounts, one containing his bill at the "butteries," and generally including the charge for coals and any fines¹ he may have incurred; the

¹ Small fines are often imposed for being out after the gates are shut, neglecting to return books to the College Library, and for other breaches of College rules.

other comprising the charge for the dinner in Hall, for "sizings" (extras), and for anything supplied to his rooms from the College kitchens. The object of these bills is to enable a person at once to check any incorrect charge. These bills should be kept and added up at the end of the Term, the amount of them should tally with the items of the Cook and Butler (or Steward) in the College account; and it is desirable that any Student on finding an error or apparent overcharge should apply at once to the Butler with regard to the Steward's bill, and to the Cook, or Clerk of the Kitchen, with respect to the bill for Commons in Hall, Sizings, &c., and if not satisfied, should complain to the Steward.

There is also in most Colleges a head of account called variously *College payments, detriments, or allocations*. This goes to defray various miscellaneous establishment charges, such as lighting and warming and keeping in order the public part of the College (i.e. the Chapel, Hall, Library and courts), printing, stationery, and the providing table-linen, plate, china and hardware for the use of the Students. This varies in amount from £6 to £12 in the year. In some Colleges coals are supplied to Students at market prices. The lodging-house keepers furnish them in most cases at about 6*d.* a day.

ATTENDANCE.

Every set of rooms in College is under the care of a "bedmaker," who is generally a female, but sometimes a man and his wife are attached to each staircase. At the Colleges where there is only a female "bedmaker," the attendance of a man-servant (called a gyp) may be had if desired. The payment for bedmaker varies from £1. 10s. to £2. 2s. a term. A gyp usually receives £1. 10s. per term. Other charges, such as shoe-cleaning, about 7s. 6d. per term, &c., require no explanation.

The following is a *low average* of the necessary expenses as contained in the College account, but it is not the *lowest possible* sum, as in some Colleges Rooms may be had for £4 a term. A sizar would pay only £6 for tuition instead of £21, and something less than others for College payments, so that a sizar's College expenses may be as low as £65 per annum.

STUDENT'S NECESSARY COLLEGE EXPENSES,
(viz. TUITION, BOARD and WASHING).

| <i>Annual.</i> | £ | s. | d. |
|------------------------|----|----|----|
| Tuition..... | 21 | 0 | 0 |
| Rooms, Rent | 10 | 0 | 0 |
| Attendance, &c. | 6 | 6 | 0 |
| Coals | 6 | 0 | 0 |
| College Payments | 6 | 0 | 0 |

| <i>Cost of Living.</i> | £ | s. | d. |
|---|-------|----|----|
| Bread, butter and milk for breakfast and Tea, and Dinner at £1. 2s. a week, for 26 weeks, making the full 3 Terms' residence in the year | 27 | 6 | 0 |
| Laundress | 5 | 8 | 0 |
| | <hr/> | | |
| Amount | £82 | 0 | 0 |
| | <hr/> | | |

In addition to this there is the cost of Groceries, which the Students find for themselves.

Besides these strictly necessary expenses there is one which frequently much augments the College bill, viz. the "Cook's bill." This includes extras in Hall, and all dishes furnished to an Undergraduate in his rooms. Various restrictions are made at different Colleges as to its amount. And there are University Regulations intended to prevent Lodging House keepers from receiving Dinners or Suppers for the Student lodging with them without the sanction of the College Tutor. Some Students spend little or nothing under this head, but £5 per term is not an uncommon amount, and in many cases it is very considerably more. Undergraduates have to send a written order for what they require. It is very desirable that they should order *exactly the quantity they require*, as a great deal of useless expense is incurred by the unnecessary quantities that are supplied. Some Undergraduates are in the habit of absenting themselves from their College Hall. This of course involves an additional expense and it is generally

regarded by the tutor as a bad sign : it often goes along with undesirable pursuits or connections.

The general result of inquiries as to the amount of College bills comes to this. It is possible for a Student (a Pensioner) to keep his College bills down to about £80 a year ; but to do this he must not only be very careful to order nothing more from the butteries or kitchens than he positively requires, and he must choose his lodgings or his rooms with strict regard to economy. At present prices it may be expected that a year's College bills of a Student living as the majority do will come to about £105 a year ; while, for persons who engage much in society and entertainments, the College bills will amount to £150 a year, exclusive of tradesmen's bills.

In addition to the College bill, the account of the Grocer and Bookseller must be considered necessities to a certain amount ; they are sometimes put into the College bill.

We now come to personal expenses, which range between limits widely apart. Many amusements may be obtained at a very small cost, and a person who is debarred from all such does not reap the full advantages of the place. The subscription to the University Reading and Debating Club ("The Union") is £1. 1s. per term for 9 terms, with an entrance fee of £1. 1s. ; or a member of the University may become a Life Member of the Society by a payment on entrance of £7. 17s. 6d. It has a good Library, and books can be taken out.

A person who can afford £8 a term for pocket-money may join in most of the ordinary pursuits. It is very common for parents to give their sons £10 or £15 a term for this purpose, and many spend considerably more. Again, any amount of money may be spent in entertainments; £10 a year for wine, coffee, waiting, &c., in addition to the amount named under the Cook's bill, may be put down as a moderate expenditure. It is best for the parents themselves to provide their sons with what wine they think proper.*

There is a tendency to increase the number of College and University clubs for purposes of amusement. Freshmen who are invited to join them are warned not to involve themselves in such clubs until they find what time they have to dispose of. In many Colleges the various athletic clubs are amalgamated, for the sake of greater economy in management. The total subscription to these is about £1. 15s. a term.

In considering the expense of an amusement the time during which it can be enjoyed is a consideration. Cricket is only available for two months out of the Academical year. Boating is carried on during all three Terms, but this advantage is not gained by all those who wish to row. Those who do not shew promise of being good enough for a racing crew have a difficulty in getting an oar; and as at present the lowest division of Boats is excluded from the races of the Easter Term, their crews have to engage in other

amusements during that Term. Football, lawn-tennis, and bicycling are very popular, and do not entail much outlay.

We shall not here touch on the more expensive pursuits, such as those connected with horses, as persons who wish their sons to have such amusements must not be scrupulous on the subject of expense. In late years there seems to be a large diminution in the number of Undergraduates who hunt.

We now come to the important item of dress, and on this point it can only be said that a young man need spend no more on clothing at the University than he would elsewhere. But those who have a tendency to extravagance or vanity, usually shew it in this direction. Parents in the vacation can judge from their son's appearance as to his expenditure on this head, and can look to the tailor's and hosier's bills; if the amounts of these are not appended to the Tutor's account inquiry should be made about them.

The Colleges have generally yielded to the desire to put the dinner-hour later, and luncheon has, in consequence, become a more substantial meal. But the extravagance of past generations in 'College Wines' has almost entirely disappeared. An Undergraduate invites his friends to coffee after the Hall dinner, and in most cases the cigarette or pipe is consumed rather than the cigar.

Friends visiting Cambridge cause at times con-

siderable expense to Undergraduates. The gaieties introduced in the Easter Term have largely increased the expenditure of a considerable number of men. Visitors will stay a week or more, breakfasting, lunching, and supping, not only with their sons, but with the whole circle of their sons' friends.

We now give three estimates, one of the lowest amount that can be reckoned upon, one of a fair average standard, and a third of the amount which a Student, whose friends do not wish him to be debarred from any reasonable enjoyment, on the ground of expense, may spend without running into extravagance. There are of course some who have been used to live in an expensive style, and who, with the sanction of their friends, continue at the University the style of living to which they have been accustomed. In such exceptional cases the rate of expenditure will no doubt considerably exceed the highest estimate given in the following table.

| | Lowest estimate. | Average estimate. | Higher estimate. |
|--|---------------------|----------------------|---------------------|
| College bills | £82 | 105 | 150 |
| Grocers' and Booksellers' bills | 12 | 15 | 20 |
| Travelling expenses (to and from Cambridge) | 6 | 6 | 10 |
| Pocket Money for spending in the University | 12 | 30 | 45 |
| Tradesmen's bills for per- sonal expenses and enter- tainments | 30 | 46 | 70 |
| | <hr/> | <hr/> | <hr/> |
| | 142 | 202 | 295 |
| | <hr/> | <hr/> | <hr/> |

The above calculations are made for 26 weeks, but as there is no charge for rent or College tuition during the Long Vacation residence (commonly 7 weeks) the cost for 33 weeks is only about £10 more than that for 26 weeks.

Nothing is here allowed for Private Tutors. The expense of such assistance is £9 for the Term. The question of how far it is necessary or advisable is discussed in the articles on the separate courses of study. Persons of good attainments can generally secure sufficient assistance from the College, in the way of Scholarships, to pay for the private tuition they require.

It must also be remarked that the estimate here given takes no account of the vacations; any expense for board or travelling or tuition in vacation time will be extra.

Permission to reside in College during the months of July and August is generally given to steady and industrious Students who are reading for Honours. The fee for private tuition during this period is £10. 10s.

A very great saving in the expense of a University education is effected if the Student reside with his family in the town. The only College expenses then incurred are tuition, College payments, and in a few cases the Dinner in Hall; the other expenses are also very materially reduced.

The case of Non-Collegiate Students will be the subject of a separate Article. Here the case of members of Colleges only is considered.

It may be mentioned that the maintenance of the Undergraduates is not made a source of profit to the College; all that is aimed at, in regulating College charges, is to make the establishment support itself without assistance from the endowments, which are disposed of among the members of the foundation and for specified objects, according to the directions of the Statutes.

Every tradesman in Cambridge is bound to send to the Tutor of each College, every quarter, a list of such bills due to him by the pupils as exceed £5. In some Colleges certain bills are paid by the Tutors, but a list of the amounts of all of them is in all cases sent to the parent, who should always apprise the Tutor, if he find any accounts to have been omitted. Discount should be obtained on tradesmen's bills paid at the end of the term.

It is best for a Student to have a fixed allowance, that he may know what he has to spend, and regulate his style of living accordingly; but the parent should pay the College and other bills himself, giving the balance from time to time to the Student.

It may be repeated that the secret of economical management is to pay ready money, and to specify precisely what is wanted when dishes are ordered, or plate or glass hired for any kind of entertainment. A Student, for instance, who orders "coffee for six" from the grocer's, may receive an excessive quantity of muffins and toast.

Again, it should be fully understood that the Undergraduate is at liberty to have from the butteries as little bread or butter or milk, &c. as he chooses, and that he may have none at all; and that he should not take more than his daily consumption requires from a notion that his bed-maker, or the people with whom he lodges, will expect him to do so. Bedmakers and lodging-house keepers are paid for their services on the supposition that they have no perquisites, and should a Student have any special reason for wishing to increase the remuneration of his attendants, he had better do so by giving a trifle in money; he then knows exactly what he parts with.

The friends of an Undergraduate sometimes open an account for him at a Cambridge bank, and with a sensible young man this is a convenient plan enough; it teaches him also to manage his own affairs. But some are wholly unequal to this, and a cheque book seems to them an endless means of getting money at will—they spend in a Term what was meant to last for a year, and get into trouble by giving cheques for amounts greater than their balances.

NON-COLLEGIATE STUDENTS.

To the general information as to the position of Non-Collegiate Students which is given in the Introduction to the present work but little needs to be added. It may be repeated that such a Student is in the same relation to the University as if he were a member of a College, but, instead of being in connection with a College, is under the supervision of a Board elected by the Senate of the University. The Censor appointed by this Board is the officer through whom all communications are addressed to it; to him everyone should apply for information who entertains the thought of becoming a Non-Collegiate Student; the Student already admitted should consult him as to choice of lodgings, call on him on his arrival in Cambridge, and habitually apply to him for direction as to his studies, the opportunities of instruction open to him, the requirements of the University as to residence, examinations and discipline, and any

other points of conduct on which he wishes for advice. To the Censor returns are made by the lodging-house keepers of the hours at which Non-Collegiate Students return home at night ; and he fulfils the functions of Prælector in sending in the names of Students as candidates in their several examinations, and in presenting for degrees those who have satisfied the requirements of the University.

The candidate for admission must produce a testimonial to character, with a reference to two respectable persons, and, if he is a minor, the written consent of his parent or guardian to his residing at the University as a Non-Collegiate Student. He is not required to pass any examination on entrance or matriculation, and the one question concerning sufficiency of preparation on which he should satisfy himself beforehand, is, whether he has a reasonable prospect of being ready to pass at the suitable times the University examinations in which he intends to be a candidate. In the case of one who does not aim at distinction, it need only be asked, whether his attainments and ability are such that he may hope to pass the Previous Examination in due time.

In the case of a very young Student applying for admission the Board must be satisfied that he will be under special supervision in the house where he lives ; in such cases the regulations affecting licensed lodging-houses are insufficient.

Some exceptionally young Students have been admitted on the understanding that they should reside with persons of approved position and character; Students not less than seventeen or eighteen years may live in lodgings licensed by the University authorities. The choice of a house at some distance from the centre of the town sometimes enables a Non-Collegiate Student to live in comfortable lodgings at a much cheaper rate than prevails amongst lodgings in the immediate neighbourhood of the Colleges. In many of the latter also the habit of receiving Students who dine in the College Halls, and obtain supplies from the College Kitchens, has made it difficult to arrange for the service needed by those who habitually dine in their own rooms. But some Students will always in their choice of rooms prefer convenience of situation to cheapness or comfort at a greater distance. In estimating the cost of rooms it should be considered (1) how many weeks are included in the term for which they are to be engaged, and (2) whether the price charged includes cooking, shoe-cleaning, and all attendance (except washing), and the use of the necessary house-linen, china, glass, and plate, these not being usually provided by lodging-house keepers for the sums named in their licences.

The Non-Collegiate Student is subject to the usual discipline of the University as to hours at night, and the wearing of academical dress. He

is under the supervision of the Proctors, as well as of the Censor and Assistant Censor of the body to which he belongs. Partly for the sake of discipline, partly to give evidence of being in residence, he is required to call at the Censor's office, and sign his name in a book kept for that purpose, on five days in each week ; or, after attending the Service, he may similarly sign either at King's College Chapel or at St Paul's Church.

All Inter-Collegiate lectures are open to Non-Collegiate Students, on payment of very moderate fees. The Professors' lectures are open to them equally with members of Colleges ; so also are University Scholarships and Prizes. Colleges usually require previous membership as a condition of election to their foundation Scholarships, and the exceptions have lately been still rarer than before ; still, during the year 1890, Non-Collegiate Students have gained Scholarships by open competition in special subjects at Trinity and Caius Colleges. An undergraduate who has kept some terms as a Non-Collegiate Student and has been allowed to migrate, may count the terms already kept, and may usually compete for any Scholarship or other emoluments on an equal footing with those of the same standing who commenced their residence in the University as members of the College. Some School Exhibitions, the Exhibitions of several of the London Companies, and some other benefactions, may be enjoyed by Non-Col-

legiate Students, but in other cases a restriction to members of Colleges is at present maintained.

It is evident that this mode of residence will suit best those who, while they are of studious and steady habits, derive least benefit from the special institutions of the Colleges. Men of mature age are often disinclined or unable to enter fully into the companionship of youths almost fresh from school. Married men, or students living with their parents or other relatives or friends, do not need the stricter restraints, or the common dinner of the College. The associations of the College Chapel may be, and in some degree have been, replaced by a voluntary participation in a similar course of services held in one of the parish churches, or in King's College Chapel, where special seats are allotted to the Students. Lectures for the Previous and General Examinations are provided for a small fee at the house belonging to the Board, to such as wish to attend, but are imposed as a matter of obligation upon none. Scholarships and other prizes, which to many students are a main reason for entering the Colleges, are felt by others to be beyond their reach, at least at the beginning of their residence; and not a few of these will justly regard the expenses, which are hardly avoidable in the social life of a College, as a sufficient reason for not entering upon it at once without the certainty of some pecuniary aid. Such will either adopt the position of Non-Collegiate Stu-

dents as suitable for the whole period of their Undergraduate life, or will look upon it as a safe and fitting introduction to a later competition for College emoluments. Medical Students and others occupied with special subjects, as well as persons imperfectly prepared to enter on some of the ordinary University studies, may find little or no help afforded them in Lectures of some Colleges; these may find the payments necessary in a College to be unsuitable for them, and may seek in the position of Non-Collegiate Students the opportunity of providing themselves with the instruction which they need, and paying for no other. It is not to be supposed that the Non-Collegiate Student is one specially distinguished as being in receipt of eleemosynary aid. His necessary expenditure is less than that of the average member of a College, but this is mainly because he requires less, or allows himself less, of the comforts which money buys. He foregoes the obvious advantages of common meals and other institutions publicly arranged to suit those who adopt a common standard of living, in order that he may be free to provide exactly for his own wants, without reference to the frugality or luxury of others. In general, the unmarried Non-Collegiate Student spends considerably less than the unmarried undergraduate of a College; but he is free to spend more if he has more to spend. It is desirable therefore that parents, in arranging for the University life of

their sons, should consider whether they are likely to be the better for the greater freedom accorded to Non-Collegiate Students.

In the case of those who have commenced their residence at a College, and wish afterwards to become Non-Collegiate Students, the University requires a statement from the Head of the College, that the Student's conduct throughout has been satisfactory, and that he considers him a fit person to reside at the University as a Non-Collegiate Student. One class of undergraduates who might readily obtain this certificate are nevertheless not welcomed by the Non-Collegiate Students' Board. The practice of the Board has always been to refuse the applications for admission of members of Colleges who have repeatedly failed to pass the prescribed University Examinations.

No attempt has been made to ascertain the *average* annual expenditure of all the Non-Collegiate Students at any one time; but exact statements voluntarily made by a number of Students establish the fact that the necessary expenditure in Cambridge of a Student in Arts who is willing to live frugally, and who keeps only the minimum residence in each term, can be kept under £55 per annum on an average of the three years. This sum may be regarded as the *minimum*. It may be thus accounted for :

| | £ | s. | d. |
|--|----------|----|----|
| (1) For three years' expenses in lodgings, board, washing, coals, use of linen, gas-light and all attendance (about seventy-eight weeks) | 110 | 0 | 0 |
| (2) For three years' payments to the Board, and Capitation Tax to the University... | 13 | 16 | 0 |
| (3) For Lectures, say | 15 | 0 | 0 |
| (4) Special payments for Caution Money, Entrance Fee, Matriculation, Examinations, and Degree | 24 | 2 | 0 |
| (5) Cap and gown, say | 1 | 10 | 0 |
| | £164 8 0 | | |

In this estimate books are assumed to be provided otherwise, as well as clothes, travelling, and other personal expenses. But some have found it possible to save enough out of (1) and (3) to provide the few books that are indispensably necessary. A larger estimate will be better and truer for the great majority of Students. Additions may be made for

(a) more comfortable living, with a margin for recreation clubs and small social expenses ;

(b) longer residence ;

(c) additional fees (as after failure in examinations) ;

(d) more books ; and

(e) special kinds of instruction.

Voluntary returns made in answer to an invitation addressed to all the Senior Students

living in lodgings shew variations in the cost of living from £1. 2s. 6d. to £2. 6s. 6d. a week, the average being about £1. 15s.

It is seldom desirable to keep only three-fourths of each term. Especially, Candidates for Honours and Medical Students need to reside not only a larger part of each term, but some portions of the vacations. Vacation residence (which requires special permission) is inexpensive, no fees being payable on account of it.

Professorial instruction, open to all members of the University alike, is not always gratuitous. It is so in Divinity and many other subjects. But students of Medicine and of Natural Sciences must pay fees for their Lectures as well as for Laboratory work.

College Lectures in Classics and Mathematics may be attended by Non-Collegiate Students for £1. 1s. a term; two such fees in one term being the most that any one student is likely to pay for Lectures in these subjects. For Law, History, Moral Science, and Divinity, the same statement is generally true. The fee (voluntary) to each of the Classical and Mathematical Lecturers appointed by the Board is 15s. a term.

Private tuition is necessary for a "backward"

A backward student

two, or more; a

it to give him

others. The use

for the months

seek high honours in Mathematics will require this help almost continually. In other subjects it is less indispensable.

The *average* yearly expenditure of those who made the voluntary returns mentioned above was under £78, exclusive of private tuition; inclusive of this it was under £85. It will not be far from the truth to infer that the average expenditure in Cambridge of Non-Collegiate Students of all classes living in lodgings is between £75 and £85 a year, exclusive of clothes and travelling expenses.

There is a voluntary subscription of 16s. a term to the Students' Amalgamation Club, which confers membership of the Literary, Debating, Boating, Cricket, Football, Lawn-Tennis, and Swimming Clubs.

The payments which are obligatory on all Non-Collegiate Students who take the Ordinary B.A. degree are these :

| | £ | s. | d. |
|---|----|----|----|
| Caution Money (ultimately returned) | 1 | 0 | 0 |
| Entrance Fee | 4 | 10 | 0 |
| To the Board, nine terminal fees (in all)..... | 13 | 10 | 0 |
| To the University, a Capitation Tax of 17s. | | | |
| a year, for three years..... | 2 | 11 | 0 |
| tending the University, Matriculation Fee | 5 | 0 | 0 |
| As a matter of fact, during Previous Examination Fees | 2 | 10 | 0 |
| 1890, about 11 per cent. of those | 2 | 0 | 0 |
| appear in the List for Part I of the | 3 | 0 | 0 |
| presented themselves for the Examinæ..... | 7 | 0 | 0 |

II.

If the Degree in Honours is taken, there must also have been paid £1. 5s. for the Additional Subjects Examination, and, instead of the General and Special Examinations Fee, £3 on admission to the Tripos Examination.

There is no fee to the Board on taking the first degree. If the Student proceeds to a second degree, he pays to the Board a fee of three guineas in addition to the fee paid to the University. There is no Prælector's fee payable by Non-Collegiate Students. The fees payable to the Common Chest of the University on admission to the various degrees are fully stated in a table contained in the article on University and College expenses..

THE MATHEMATICAL TRIPOS.

THE form of the Examination for the Mathematical Tripos is about to undergo a considerable change. The regulations now existing continue in force until the end of June, 1892, after which the new scheme comes into operation.

The Examination will be divided into two parts, one of which, Part I, will be conducted in May and June, in two portions of four days each, and the other, Part II, will be conducted in the June of the following year. Part II is intended for those students who wish to make advances into the higher regions of Pure and Applied Mathematics, and it is not expected that many students will avail themselves of this opportunity of extending their studies.

As a matter of fact, during the years 1883 to 1890, about 11 per cent. of those whose names appear in the List for Part I of the Tripos presented themselves for the Examination in Part II.

In Part I there will be four days of Examination in the latter part of May, and, after an interval of eleven days, there will be another four days of Examination.

The results of the first four days will enable the Moderators and Examiners to decide on the candidates to be allowed a place in the Honour List.

The results of the whole eight days will determine, in order of merit, the Wranglers, the Senior Optimes, and the Junior Optimes.

The results of the Examination in Part II will enable the Examiners to assign classes to the candidates, each class being arranged in alphabetical order, or split up into divisions, at the discretion of the Examiners, each division being arranged in alphabetical order.

The majority of the candidates for the Tripos will, in all probability, present themselves for the Examination of Part I in their third year, but, under the new regulations, it will be possible for a student to take Part I in his second year. In that case it will be open to him to undertake Part II, if he does so at all, either in his third year, or in the year after his degree.

Again, as in the case of other subjects, a student who has taken honours in another Tripos will be permitted to present himself for Part I, either in his third year or in the year after his degree.

To those students who may find that the subjects

of the first four days of the Examination in Part I are too difficult or of too wide a range, the institution of the special Examination in Mathematics will offer the inducement to make a study of a moderate, but valuable, range of elementary subjects, and the advantage of being tested, and of obtaining the B.A. degree, as in other branches of literature and science.

The following extracts from the regulations give the details of the Examinations for Part I and Part II, to be conducted in May and June 1893 and 1894, and for such time after as the Senate of the University may determine.

REGULATIONS FOR THE MATHEMATICAL TRIPOS
EXAMINATION, PART I.

1. A Student may be a Candidate for Honours in the first part of the Examination for the Mathematical Tripos if at the time of such Examination he be in his fifth term at least, having previously kept four terms: provided that nine complete terms shall not have passed after the first of the said four terms unless the Candidate shall have previously obtained Honours in one of the Honours Examinations of the University, in which case he may be a Candidate provided that twelve complete terms shall not have passed after the first of the said four terms. No Student of a different standing shall be allowed to be a Candidate unless he shall have obtained permission from the Council of the Senate.

2. No Student who has presented himself for this Examination may present himself on another occasion for the same Examination.

3. A Student who shall pass the first part of the

Examination for the Mathematical Tripos not earlier than his eighth term of Residence shall be entitled to admission to the degree of Bachelor of Arts provided that he shall have kept the requisite number of terms at the time when he applies for his degree. A Student who shall pass such Examination earlier than his eighth term shall be excused the General Examination for the B.A. Degree.

4. The Examination shall extend over eight days; and between the first four days and the second four days of the Examination there shall be an interval of eleven days.

5. The Examination for the first four days shall be confined to the subjects defined by Schedule I.

6. On the eleventh day after the end of the first four days of the Examination the Moderators and Examiners shall declare what Candidates have so acquitted themselves as to deserve Mathematical Honours, and what Candidates among those in their eighth term at least have so acquitted themselves as to deserve an Ordinary B.A. Degree, and what Candidates among those in their fifth term at least have so acquitted themselves as to deserve to be excused from the General Examination for the Ordinary B.A. Degree; and those Candidates only shall be admitted to the remainder of the Examination who are declared to have so acquitted themselves as to deserve Mathematical Honours.

7. The Examination for the second four days shall comprise the subjects included in Schedule II.

8. The Examination for the first four days shall begin on the Tuesday before the last Sunday but one in May; and the Examination for the second four days shall begin on the Wednesday after the last Sunday in May. If Ascension Day fall on any of the days fixed for Examination there shall be no Examination on Ascension Day, but the Examination shall begin one day earlier than is here provided.

9. The Examination shall be conducted according to Schedule III.

10. On the tenth day after the end of the Examination the Moderators and Examiners, taking into account the Examination for the whole of the eight days, shall publish a list of the candidates arranged in order of merit in the three classes of Wranglers, Senior Optimes, and Junior Optimes.

11. In all the subjects of Examination there shall be introduced examples and questions, by way of illustration or explanation, arising directly out of the Propositions themselves; but this rule shall not be understood to sanction the introduction of problems into parts of the Examination which are not exclusively devoted thereto.

12. The same questions shall be proposed throughout the Examination to all the Candidates, and there shall not be contained in any bookwork paper more questions than well-prepared Students may be expected to answer within the time allowed for the paper.

SCHEDULE I.

Pure Geometry; namely, Euclid, Books I. to VI., Book XI. Props. i. to XXI., Book XII. Props. i. II.; simple properties of lines and circles; inversion; the elementary properties of Conic Sections treated geometrically, not excluding the method of projections; reciprocation, harmonic properties, curvature.

Elementary Algebra, including the binomial theorem, the exponential theorem, logarithms.

The elementary parts of Plane Trigonometry, so far as to include the solution and properties of triangles.

The elementary parts of Plane Analytical Geometry; namely, the straight line and circle referred to rectangular axes; the parabola, ellipse and hyperbola, referred to their principal axes; with simple applications.

The elementary parts of the Differential and Integral Calculus; namely, differentiation and integration of simple

functions, Taylor's theorem, maxima and minima with one independent variable, tangents to curves, curvature, areas of curves.

The elementary part of Statics; namely, the equilibrium of forces acting in one plane and of parallel forces, force diagrams, the centre of gravity, the mechanical powers, friction, virtual work.

The elementary parts of Dynamics; namely, uniform, uniformly accelerated, and uniform circular motion, projectiles in vacuo, simple harmonic oscillations, collision, energy.

The first, second, and third sections in Book I. of Newton's Principia, the propositions to be proved by Newton's methods.

The elementary parts of Optics; namely, the reflexion and refraction of light at plane and at spherical surfaces, not including aberrations; the eye; the construction and use of the more simple instruments; achromatism.

The elementary parts of Astronomy, so far as they are necessary for the explanation of the more simple phenomena, without the use of spherical trigonometry; astronomical instruments.

The elementary parts of Hydrostatics; namely, the pressure of fluids, specific gravities, floating bodies, barometric heights; the construction and use of the more simple instruments and machines.

The elementary parts of Heat; namely, specific heat, latent heat, the mechanical equivalent of heat, density of gases as depending on pressure and temperature, indicator diagrams.

The elementary parts of Electricity; namely, elementary properties of the potential; lines of force; condensers; Ohm's law with simple applications; sine and tangent galvanometers.

galva

SCHEDULE II.

Algebra; Theory of Equations.

Trigonometry, Plane and Spherical.

Analytical Geometry, Plane and Solid, including curvature of curves and surfaces.

Differential and Integral Calculus, including Fourier's Theorems and Calculus of Variations.

Differential Equations, including partial differential equations of the first order: Functions of Legendre and Bessel.

Elementary Elliptic Functions, excluding the Theta Functions, and the theory of Transformations.

Statics, including bending of rods: Attractions.

Hydrostatics, including Capillarity, and rotating homogeneous liquid ellipsoids.

Dynamics of a Particle.

Rigid Dynamics.

Hydrodynamics, including irrotational motion of a perfect fluid, two-dimensional waves in liquid under gravity, plane waves of sound. Vibrations of a stretched string.

Geometrical Optics.

Spherical Astronomy.

Electricity and Magnetism, including properties of the potential, distribution of electricity on spheres and cylinders, condensers, the methods of inversion and electric images, Ohm's law, distribution of currents in a system of linear conductors, steady flow in two dimensions: law of magnetic force, action of two small magnets on each other, laws of induced magnetization with applications to concentric spheres and cylinders, elements of terrestrial magnetism: the electromagnetic action of linear electric currents, the laws of the induction of currents, coefficients of self and mutual induction.

SCHEUDLE III.

| Days | Hours | Subjects |
|-----------|-------|---|
| Tuesday | 9—12 | Pure Geometry and Newton I. |
| | 2—5 | Algebra and Trigonometry |
| Wednesday | 9—12 | Analytical Geometry, Differential and Integral Calculus |
| | 2—5 | Statics, Dynamics, and Newton II, III. |
| Thursday | 9—12 | Optics and Astronomy |
| | 2—5 | Hydrostatics, Heat, and Electricity |
| Friday | 9—12 | Problems |

The methods of Analytical Geometry and the Infinitesimal Calculus are not to be used in the papers of Tuesday morning and afternoon; and the Examiners may also, if they think fit, specify that certain of the problems of Friday morning are to be solved without their use. But the questions in all the papers of the first four days except that of Wednesday morning will be such as can be naturally solved without the aid of these methods.

| Days | Hours | Subjects |
|-----------|-------|---|
| Wednesday | 9—12 | Natural Philosophy |
| | 2—5 | Pure Mathematics |
| Thursday | 9—12 | Pure Mathematics |
| | 2—5 | Natural Philosophy |
| Friday | 9—12 | Pure Mathematics and Natural Philosophy |
| | 2—5 | Pure Mathematics and Natural Philosophy |
| Saturday | 9—12 | Problems |

FROM THE REGULATIONS FOR PART II.

1. The Examination shall begin on the Thursday after the last Sunday in May and shall extend over three days. If Ascension Day fall on any of the days fixed for Examination, there shall be no Examination on Ascension Day, but the Examination shall begin one day earlier (exclusive of Sunday) than is here provided.

2. The Examination shall comprise the subjects in Schedule IV., and shall be conducted in accordance with Schedule V.

3. A Student may be a Candidate for Honours in the Examination for Part II., if at the time of such Examination he be in his eighth term at least having previously kept seven terms, provided that twelve complete terms shall not have passed after the first of the said seven terms: provided further that he shall have obtained Honours in the Mathematical Tripos Part I. in a preceding year.

4. Before the first day of December next preceding the Examination the Prælectors of the several colleges shall furnish the Registrary with lists of the Students of their colleges who intend to present themselves for Examination, specifying the divisions and subjects in which each Candidate desires to be examined.

5. On the tenth day after the end of the Examination the Examiners shall publish a list of those examined and approved; such list shall consist of three classes, each containing one or more divisions, according to the discretion of the Examiners, and each division being arranged alphabetically.

Proficiency in subjects contained in two divisions of Schedule IV. shall be necessary to qualify a Candidate for admission to the first Class.

SCHEDULE IV.

DIVISION I.

Differential and Integral Calculus, including Definite Integrals and the Calculus of Variations.

Differential Equations.

Calculus of Finite Differences.

Harmonic Analysis, including the functions of Legendre and Laplace, Bessel and Lamé and Fourier's Series.

Theory of Chances, including Combination of Observations.

DIVISION II.

Theory of Equations, including the Theory of Substitutions.

Modern Algebra.

Theory of Numbers; Theory of Congruences and the Theory of Forms.

Quaternions and other non-Commutative Algebras.

DIVISION III.

Theory of Functions of Complex Variables.

Elliptic Functions.

Abelian and Multiply-Periodic Functions.

DIVISION IV.

Projective Geometry.

Analytical Geometry of Curves and Surfaces.

DIVISION V.

Theory of Attractions and Potentials.

Geodesy.

Dynamics.

Geometrical Astronomy.

Physical Astronomy.

DIVISION VI.

Theory of Elasticity.

Geometrical Optics.

Physical Optics.

DIVISION VII.

Vibrations, including Waves and Tides.

Hydrodynamics.

Acoustics.

DIVISION VIII.

Electricity and Magnetism, including the Electro-magnetic Theory of Light.

Thermodynamics and the Kinetic Theory of Gases.

Conduction of Heat.

SCHEDULE V.

| Days | Hours | Subjects |
|----------|-------|------------------------------|
| Thursday | 9—12 | Divisions I, II, V, VI |
| | 2—5 | Divisions III, IV, VII, VIII |
| Friday | 9—12 | Divisions I, III, VI, VII |
| | 2—5 | Divisions II, IV, V, VIII |
| Saturday | 9—12 | Divisions I, IV, V, VII |
| | 2—5 | Divisions II, III, VI, VIII |

It must be distinctly understood that the results of the first four days of the Examination in Part I determine the list of the candidates who are considered to deserve a place in the Honour List. Those candidates who have not so far satisfied the Examiners, if not rejected altogether, may be allowed an ordinary degree, or may be excused from the General Examination for the ordinary B.A. degree, in which case a candidate will have to pass one of the Special Examinations.

The names of those who are absolutely rejected are not published. Usually there are very few who fail entirely, for the Examination is well understood by College Lecturers and Private Tutors, and men who are hopelessly unprepared do not often venture to try the patience of the Examiners.

Students commence their residence in the University with such various degrees of preparation, that no exact course of reading can be laid down; and, moreover, the tastes and idiosyncrasies of different men may render many different arrangements advisable. Nevertheless it may be useful to give a general view of the order of reading, and of the books to be employed, in order to secure a place, or to take high rank, in the Tripos.

A certain amount of guidance will be given by the College Examinations; hitherto it has been the practice of all Colleges to hold Examinations at the end of May or the beginning of June, and of some Colleges in December; under the new system it will probably become a general practice to hold Examinations in December as well as in June.

With slight variations at different Colleges it may be expected that the subjects of Examination will be, for the first year; Euclid, Algebra, Trigonometry, Geometrical Conics, Plane Co-ordinate Geometry, Differential and Integral Calculus, Elementary Mechanics, Theory of Equations, and

the first section of Newton's Principia, or, possibly, the first three sections.

For the second year, Solid Geometry, Differential Equations, Fourier's Theorems, Calculus of Variations, Statics and Attractions, portions of Electricity and Magnetism, Hydrostatics including Capillarity, Optics, Dynamics of a Particle, and some portions of System Dynamics.

For the third year; advances on the preceding subjects, with Formal and Physical Astronomy, and Hydrodynamics. Elementary Elliptic Functions, and the Functions of Legendre and Bessel may be introduced into the Examinations of the second or third year.

The preceding sketch represents a probable state of things; but it is quite possible that a more rapid progress may be made, and that, in consequence, the earlier Examinations may be more heavily weighted.

The student who aims at high place in the Tripos will naturally endeavour to keep on a level with, or to be ahead of, the College Examinations, and he will certainly find it greatly to his advantage to do so. The range is large, but it is usual to include in each Examination one or more of the Four Days' subjects, and the candidate whose attention is limited to the elementary branches of Mathematics will on each occasion be able to test his own proficiency.

Roughly speaking, the candidates for the Mathematical Tripos may be divided into three

groups. There will be some of the candidates who, from insufficient preparation before coming into residence, or, from want of time during residence, will be compelled to limit their reading to the elementary branches of Mathematical Science, and to give their attention, chiefly or entirely, to those subjects which are dealt with in the first four days of the Examination.

The majority of the candidates will, in all probability, aim at the mastery of all, or most, of the subjects in Schedules I and II, or, at any rate, will make a study of selected subjects from Schedule II as well as of all the subjects of Schedule I.

There will be also the few who will not only aim at the mastery of all the subjects of Schedule II, but will look forward to the prospect of devoting another year to Mathematical study, after taking honours in Part I, and of offering themselves for the Examination in Part II.

In the cases of all the three groups of candidates, it is a matter of great importance that too large a range of reading should not be attempted, and that any subject, or portion of a subject, which is undertaken, should be studied closely and thoroughly.

The questions proposed, in the Examination for the Tripos, are usually of a severe and searching character, and it is sternly conducted in accordance with the principle that knowledge, to be worth anything, must be thorough and accurate.

It is rare for a young man to obtain high honours who has not had some considerable training at school, or elsewhere, before coming into residence, but such cases do sometimes occur, and everything is possible to a man of real scientific ability, and possessed of the requisite industry and endurance. Such a man may find the first steps difficult and laborious, but he will soon discover that his intellectual strength develops rapidly, and that his advances are made with accelerated speed.

On the other hand the students who confine their attention to the elementary branches of Mathematical Science will find ample employment for their time and energies, and it must not be imagined that these subjects can be mastered without careful study and earnest intellectual effort.

The word elementary generally implies that the subjects in question are to be developed, as far as they can be, without the aid of the elaborate machinery supplied by Modern Analysis.

It will be seen however, by referring to the regulation following Schedule III, that no general restriction is placed on the use of the methods of Co-ordinate Geometry and the Differential Calculus after the first day of the Examination ; but that it is left to the discretion of the Examiners to impose such a restriction in particular cases, if they think fit to do so.

The effect of the restriction, when imposed in

any case, will be to compel the candidates to seek for a purely Geometrical solution of the problem before them, in some cases a much more difficult task than that of working out an Analytical solution.

A sketch may now be given of a course of reading, which shall form a suitable preparation for the first four days of the Examination in Part I.

It may be fairly assumed that most of the young men who enter the University with the view of reading for the Mathematical Tripos will have previously had some training in Euclid, Algebra, Trigonometry and Geometrical Conics, and, possibly, Co-ordinate Geometry and Mechanics; and indeed, without some such training, it would be generally hopeless to attempt the reading for the Tripos.

To begin with, it is a matter of great importance to obtain a good knowledge of Pure Geometry, and the student who can acquire skill in the solution of Geometrical Problems will find his subsequent labours very much lightened.

The editions of Euclid by Todhunter, and by Hall and Stevens are now in very general use, and each of them contains a very useful collection of exercises.

Casey's little book, a Sequel to Euclid, is very useful as an introduction to some of the later developments of Geometry, and the student who can afford the time to extend his Geometrical

knowledge will find Townsend's two volumes on Modern Geometry a very valuable treatise.

For Geometrical Conics the books at present in general use are Besant's, Taylor's, and Drew's.

The popular text-books on Algebra are those by Todhunter, C. Smith, Hall and Knight. Each of these writers has also published an Elementary Algebra, suitable to a beginner.

Peacock's *Algebra*, in two volumes, although somewhat antiquated, is still valuable, as giving a thoroughly sound and philosophical view of the principles of the science.

For Trigonometry, the student may use Todhunter's, Lock's, Colenso's, Walmisley's, or Hobson's.

For the subject of Plane Co-ordinate Geometry, Todhunter's Treatise, or C. Smith's may be first read. It may then be advisable to study Salmon's *Conics* and Ferrers on *Triblinear Co-ordinates*.

The Differential Calculus may be studied in the treatises by Todhunter, Williamson, or Edwards, and the Integral Calculus in the treatises by Todhunter or Williamson.

Parkinson's *Elementary Mechanics*, Greaves's *Statics*, Garnett's *Dynamics*, and Loney's *Dynamics* are all in general use, and a little shilling volume by Clerk Maxwell on 'Matter and Motion' will be found to be of great value.

On this subject however a great many useful books exist, some of which will be mentioned in the list at the end of this paper.

For Elementary Hydrostatics and Heat, the

student may use Besant's *Hydrostatics*, or Phear's, Garnett's *Heat*, and the valuable text-book by Clerk Maxwell on the *Theory of Heat*.

The treatises on Elementary Optics now in general use are those by Aldis and Heath, or selections may be made from Parkinson's *Optics*.

Clerk Maxwell's *Elementary Electricity*, and the treatises on that subject by Cumming, Silvanus Thompson, and Fleeming Jenkin will introduce the student to one of the most important of the Applied Sciences.

The first three sections of Newton's *Principia* may be studied in Frost's elaborate edition, or in Evans's *Newton*, edited by Main.

For Astronomy, Main's *Elementary Treatise* may be usefully employed, or selections may be made from Godfray's *Astronomy*; and, in conjunction with either of these books, Airy's *Elementary Astronomy*, and Herschel's *Outlines of Astronomy* would be found to be most valuable.

A Nautical Almanac is of great help in the acquisition of sound views, and a lecture on 'Navigation' by Sir W. Thomson will give many useful hints.

These books will serve as introductions to the subject of Astronomy, but the range is large, and the literature enormous; and, to acquire a really good knowledge of elementary formal Astronomy, the student will have to go through a very extensive course of reading.

Proctor's books for instance form a treasure-

house of Astronomical knowledge, but a thorough study of these books would be a work of time.

What we have just said with regard to Astronomy applies also, although with not so much force, to the subjects of Elementary Mechanics, Hydrostatics, and Optics; the books we have mentioned will be sufficient for the Mathematical Tripos Examination, but the student would gain much benefit from a study of such books as Ganot's *Physics*, or Deschanel's *Natural Philosophy*, in which much practical illustration is given, while a very small demand is made upon the mathematical skill of the reader.

In all these subjects the student will find it necessary, not merely to study the text, but also to work out examples, and to practise himself in the solution of problems; in no other way can he hope to acquire a clear comprehension of the principles and methods expounded in the books.

We will now consider the case of the more ambitious student, who has acquired some skill in Elementary Mathematics, and starts from a higher level. He will probably enter the University with some knowledge of Co-ordinate Geometry, Differential and Integral Calculus and Mechanics..

If he is really well skilled in these subjects he may advance safely and rapidly, but let him be careful to have some test applied, and to be sure of a safe foundation. He may then arrange, as is usually done, to keep his private reading well

ahead of College Lectures, and he will thereby secure an additional revision of his studies, and will also gain time for the due consideration and full appreciation of the College Lectures.

The private Tutor will most effectively apply the tests which are requisite, and we may now remark that, for the majority of students, the aid of a private Tutor must be regarded as a matter of necessity.

The present system of severe competition compels such close attention to the subjects of Examination that the student requires special advice, to keep his reading in the right track, and to direct his attention to the most recent advances and improvements. In many cases, however, where the student is not highly advanced in his reading, he will find that a careful attention to College Lecture Courses will leave him very little time for anything else, and will thus enable him, at any rate during term time, to dispense with the aid of a private Tutor. Moreover, during the last few years, the rearrangements of College Lectures which have been made at Trinity, and at St John's, and the establishment of systems of Inter-Collegiate Lectures in other Colleges, have been intended to give a larger amount of help to undergraduate students, and to make the assistance of the private Tutor less a matter of necessity than has hitherto been the case.

Opinions of course will differ as to the order in which the various branches of pure and applied

Mathematics should be studied, and in many cases it is a matter of very little consequence.

Some points however may be mentioned as of importance, especially with reference to the second four days of the Examination in Part I.

It is a good general principle to learn the use of the tools which may be wanted, before attempting any important constructive work. For instance, if the student will master the Calculus of Variations as given in the last chapter of Todhunter's *Integral Calculus*, he will find that it will produce a great economy of time in the subsequent study of Theoretical Dynamics. For the same reason the subjects of Solid Geometry and Differential Equations should be taken up as soon as possible, a practical knowledge of these pieces of Analytical Machinery being absolutely necessary for the study of all the applied Sciences.

Solid Geometry may be first read in Aldis's, C. Smith's or Frost's book, and Salmon's on the same subject may be read by those who have time enough to make an elaborate study of the subject.

Besant's *Roulettes and Glissettes* may be examined at this; or any other, stage of reading.

Forsyth's Treatise is the book chiefly used for Differential Equations; there is however a smaller book by Woolsey Johnson, and there are very useful chapters in the French Treatises on Analysis, such as those of Duhamel, Moigno, Serret, etc.

The new treatises by Dr Glaisher and Professor Greenhill are intended to cover the range of Elliptic Functions required for the Examination, and Todhunter's book will give the information wanted for the functions of Legendre and Bessel.

The Calculus of Finite Differences is not placed on the list of the subjects for Part I, but the advanced student will find it advisable to acquire some knowledge of the subject, and for this purpose he may use Boole's Treatise, edited by Moulton, or the small Treatise by Pearson.

Acting on the principle of having first learnt the use of his tools, the student may now commence the formation of his store-house of Mechanics and Physics.

Analytical Statics may be studied in Todhunter's Treatise, Minchin's, or in the new treatise by Dr Routh.

For Dynamics, Besant's *Dynamics*, or Tait and Steele's, and Routh's *Rigid Dynamics* may be used.

Students who are working without the help of a teacher would find Walton's *Mechanical Problems* useful.

Besant's *Hydromechanics*, and Basset's *Elementary Hydrodynamics* would then follow. For Optics, Parkinson's *Optics*, or Heath's larger book, may be read, and Spherical Astronomy may be studied in Godfray's or Hymers's *Astronomy*.

For Electricity and Magnetism, the student will find that the portions of those subjects men-

tioned in the schedule are included in Maxwell's important treatise, or in Joubert and Mascart's *Electricité*. He may also consult Watson and Burbury's Treatise, and the Article by Chrystal in the new edition of the *Encyclopædia Britannica*.

Courses of lectures are given at the Cavendish Laboratory by the Professor of Experimental Physics; and Mr Larmor, of St John's College, also gives theoretical lectures on the subject.

The preceding remarks have been limited to the subjects of Part I, but the student who is really well advanced will in all probability make excursions into higher regions, and acquire an acquaintance with some of the subjects of Part II. And he will find it very advantageous to do so; the effect will be a strengthening of the more elementary branches of Mathematical Science, and a great help in the subsequent reading for the examination in Part II. It will be found that a year is by no means too long a time for the careful study of two of the divisions of Schedule III, or even of portions of those divisions.

As soon as he has passed through the Examination for Part I, or before, the student who intends to proceed to Part II, will make up his mind as to the divisions and subjects upon which he will concentrate his attention during the ensuing year.

He will then find that he can attend the lectures of some of the specialists who undertake

the teaching of the subjects contained in the various divisions, and he will receive from them the best advice as to the mode of reading and the books to be employed.

In his preparation for Part II, the student should be reminded that what is required is not so much quantity as quality, and that a first class may be obtained by producing good solutions of a few questions in two of the divisions of Schedule IV. Of course a wider range is possible to some of the candidates, but it will be always dangerous to sacrifice thoroughness and strict accuracy for a larger area of reading.

For general guidance, and with a view to starting the student on his course of reading, we now proceed to call attention to a few of the most important books in the various subjects of the Divisions.

For the study of Division I, the two quarto volumes by Bertrand on the Differential and the Integral Calculus are of great value, and an extended knowledge of the Calculus of Variations may be obtained by consulting Todhunter's History, and Jellet's Treatise, or the two volumes on the subject by Strauch. In addition to the treatise by Dr Forsyth on *Differential Equations*, already mentioned, there is the new treatise by the same Author on the *Theory of Differential Equations*.

Spherical Harmonics, and their applications to Mechanics and Electricity, are dealt with in

Ferrers's Book, in Heine's *Handbuch der Kugelfunctionen*, in Thomson and Tait's *Natural Philosophy*, and in many other books.

The Theory of Errors may be first studied in the Treatises by Airy, and Liagre.

For Division II, Netto's *Substitutionen-Theorie* will be useful, Tait's Treatise, or Kelland's, will be an introduction to Quaternions, and Salmon's *Higher Algebra* will be found to be of great value.

Some of the subjects of Division III are dealt with in Cayley's *Elliptic Functions*, in Halphen's *Théorie des Fonctions Elliptiques*, and in the treatise by Briot and Bouquet.

For Division IV, the student will consult the books by Frost and Salmon, and the original treatises by Monge and Poncelet. Darboux's *Théorie Générale des Surfaces* is a recently published work.

The region of science covered by Division V is a very wide one.

The Theory of Attraction is given in Minchin's Second Volume, and in Thomson and Tait's *Natural Philosophy*.

Godfray's *Lunar Theory* and Cheyne's *Planetary Theory* will form an introduction to Physical Astronomy, to be followed by a study of portions of Pontécoulant's *Système du Monde*, or of Laplace's *Mécanique Céleste*.

The student who makes a speciality of Dynamics will consult Lagrange's great work, the *Mécanique Analytique*, Thomson and Tait's *Natural*

Philosophy, and Routh's *Rigid Dynamics*. There are, besides, several modern treatises of great importance such as Jacobi's *Vorlesungen über Dynamik*.

For Division VI, the treatise of Lamé, *l'Élasticité des Corps Solides*, is an attractive work, and the subject may be studied in Thomson and Tait's *Natural Philosophy*.

There is a valuable paper by Maxwell in the *Transactions of the Royal Society of Edinburgh* for 1850.

For the study of Physical Optics, Airy's *Undulatory Theory*, and Lloyd's *Wave Theory*, with Aldis's *Tract on Fresnel's Theory*, are usually read at first.

Billet's *Optique Physique* is an exhaustive treatise, and valuable articles on portions of the subject will be found in Verdet's works.

The subjects which constitute Division VII are dealt with in Basset's larger *Hydrodynamics* and in Lord Rayleigh's *Sound and Vibrations*. In connection with these books the student will consult Airy's *Tides and Waves*, Green's Papers, Sir G. Stokes's Papers, Sir W. Thomson's Papers, and Helmholtz's paper in *Crelle's Journal*, 1858, or the translation by Professor Tait of this paper in the *Philosophical Magazine* for 1868.

During the last few years, many papers on the subjects of Divisions VI and VII have been published by Lord Rayleigh, Hicks, Love, and others, which will probably be recommended to

the notice of the student by the special teachers of these subjects.

For Electricity and Magnetism, in Division VIII, the Treatises by Maxwell, and by Mascart and Joubert will be found to be most valuable, and will cover a large portion of the ground to be examined.

Tait's *Thermodynamics*, and Baynes's book on that subject, are effective introductions to one of the most important branches of the science of the present time; and, for the Conduction of Heat, the classical work of Fourier at once offers itself to the student.

As this book is out of print, it may be useful to mention that a translation has been published by Mr Freeman.

Mathieu's *Cours de Physique Mathématique* and Riemann's *Differential-Gleichungen* are useful in the study of the Conduction of Heat, and Verdet also has devoted some chapters to the same subject.

The preceding sketches form outlines of the character and the amount of the reading which is required for success in the Mathematical Tripos, and so far may be useful; and they will further serve as an introduction to the vast field of literature, which offers itself to the student of Mathematical Science.

There are innumerable details, upon which information will be required, and to supply this information, with whatever other help may be con-

sidered necessary, is the function of the Professors, and of the University and College Lecturers.

The character of the questions proposed of course varies from year to year, and depends in great measure on the taste and ideas of the Examiners. Nevertheless the traditions of past Examinations, and the regulations of the Schedule, serve to prevent any violent or unexpected alterations, and a good idea of the general character of any coming Examination may be obtained by a study of the questions proposed in those of the two or three years preceding.

The Examiners are always men of high degree, and often of very great scientific distinction, and the trouble and responsibility of the work are so great that no one, who does not feel himself competent for the task, will venture to undertake it.

There may be a tendency one year to give prominence to certain branches of pure Mathematics, and another year to certain branches of applied Mathematics; but these variations are not of serious importance, and, in an Examination of so large a range, full justice is done to all the Candidates¹.

The average student must not expect to advance rapidly at first, and must not try too much. Scientific ideas are difficult to some minds, and the student need not be discouraged if he fails at once to grasp a new idea.

¹ The papers of questions are published in the *Almanac and Register*. They can also be obtained, in a quarto form, separately.

One principle is not to try at first to *remember*; let the mental effort be applied to discover the meaning of a book; the memory will usually come when it is wanted.

Again, one of the objects aimed at in a book is to illustrate general principles by particular cases; a careful study of these cases will usually give help to the patient reader, and a clear view of a difficult principle will gradually present itself to his mental vision.

Lastly, it cannot be too often repeated that much mischief is done, and many failures are caused by over-reading, that is, by attempting too wide a range of study, and, to check this tendency, much discretion is necessary on the part of a student's teachers and advisers.

A little knowledge is *not* a dangerous thing when it is real and thorough as far as it goes; and the most dangerous temptation to a student is the possibility of acquiring an extensive and showy, but superficial knowledge, of a large number of subjects, instead of a thorough acquaintance with a limited range.

A large amount of pecuniary aid is now given by the different Colleges in the forms of Scholarships and Exhibitions.

These are usually given to deserving students after the results of the College Examinations at the end of the May Term have been made known to the College authorities. Minor Scholarships are given by an examination taking place, in

almost all Colleges, some months before residence commences.

The subjects of examination include at all Colleges, Euclid, Algebra, Trigonometry, and Geometrical Conic Sections, and, in some cases, Co-ordinate Geometry, with Trilinears, Differential Calculus, and Elementary Mechanics are added.

The object of the Examiners is to find out the most promising students, and the examination is generally of a stringent character. Skill in the solution of problems, and particularly of problems in pure Geometry, is of great importance, and the candidate for a Minor Scholarship will do well to develop, as far as he can, his powers of dealing with pure Geometry, even although his doing so may have the effect of limiting the extent of his reading.

The Sheepshanks Exhibition, for Astronomy, is open to the candidature of all undergraduates, but the successful candidate, if a member of any other College, must transfer his name to the boards of Trinity College.

With this exception there are no University Scholarships given exclusively for Mathematical knowledge; and the only cases in which Mathematics appear at all are in the examinations for the Bell and Abbott Scholarships, in which some Mathematical Papers, of a somewhat elementary character, are proposed. These papers however are not generally of very great weight unless

it happens that there is a dearth of highly qualified classical Candidates.

For those who have taken the degree of B.A. the two Smith's Prizes are open to competition. These prizes are given for the best essays, on subjects in Mathematics or Natural Philosophy, which are sent to the Vice-Chancellor before the end of eighteen months after the Examination in Part I.

There are also the newly established Isaac Newton Studentships, which are intended to encourage research in Formal and Physical Astronomy, and in Physical Optics.

The total amount of residence which is compulsory is about twenty-five weeks of the year, and it is during this time that the College Lectures and Professors' Lectures are given.

The Mathematical student must not however imagine that the rest of the year may be spent in idleness. It is customary for many undergraduates, and especially for those who aim at high place in the Tripos, to reside in Cambridge during the months of July and August, and much important work can be done during the summer. Again, the Christmas vacation is a valuable period of time during which the earnest student can quietly revise and reflect over the work of preceding terms, or make preparations for the future.

It may be well to suggest that much revision is necessary in order to keep the store of acquired learning in working order; in particular, the last

six months preceding the examination will in general be sufficiently occupied by a series of revisions, and it will be only in a few cases that the student will find time for the mastery of fresh subjects or new sets of ideas.

Without attempting to discuss at large the intellectual and practical advantages of a course of scientific reading, we may call attention to the facts that the demand for Mathematical Teachers is increasing, and that there is a tendency in schools and educational institutions to give more time and attention to mathematical studies.

There are many, amongst the candidates for the Tripos, who look forward to the work of teaching as a profession, and for them there is an encouraging prospect of an increased recognition of their labours.

There are others, whose scientific learning may not be directly utilised in their subsequent careers; but, in all cases, the habits of industrious application, of careful thinking, and of accurate expression, which are amongst the general results of a course of mathematical study, are practical advantages of the greatest value in any profession, or in any of the pursuits of an active mind.

Finally, the student may be assured, that, independently of all other considerations, the fascination of mathematical study increases with the growth of knowledge, and the acquisition of skill in the processes of calculation, and that, although the labour expended may be occasionally severe, it will be found to carry with it its own reward, in

the power of dealing with scientific difficulties, and in the appreciation of the many practical applications of science, which are characteristic of the present time.

The following list contains the titles of books which are now in general use, or which may be useful for Part I, or Part II, of the Tripos Examination.

It will be of course understood that this list does not include all the books which may be useful, and the highly advanced mathematician, who may be anxious to make excursions into other regions of scientific writing, will easily obtain the requisite information from Professors, College Lecturers, or other advisers. Different treatises on the same subject are frequently mentioned, and the selection must be made to suit the taste or the capacity of the student.

Euclid. Editions by Todhunter, Potts, Deighton, Hall and Stevens, H. M. Taylor.

Geometrical Conics. Besant, Drew, Taylor, Richardson.

Problèmes de Géométrie. Catalan.

Modern Geometry. Townsend, Mulcahy, M^cDowell, Casey.

- Algebra. Todhunter, Gross, C. Smith, Hall and Knight, Chrystal.
- Choice and Chance. Whitworth.
- Trigonometry. Todhunter, Walmisley, Colenso, Lock, Johnson, Hobson.
- Elementary Mechanics. Parkinson, Todhunter, Hicks, M^cGregor, Sir Philip Magnus.
- Elementary Statics. Greaves.
- Elementary Dynamics. Garnett, Lock, Loney.
- Problems in Elementary Mechanics. Walton.
- Elementary Hydrostatics. Besant, Phear.
- Elementary Heat. Maxwell, Garnett.
- Elementary Electricity. Maxwell, Cumming, Fleeming Jenkin, Silvanus Thompson.
- Elementary Optics. Aldis, Heath.
- Newton's Principia, Books I, II, III, edited by Frost, or Main.
- Elementary Astronomy. Herschel, Airy, Main, Young, Arago (4 volumes).
- Deschanel's Natural Philosophy, by Everett.
- Cours de Physique. Jamin.
- Co-ordinate Geometry. Todhunter, Salmon, C. Smith, Puckle, Turnbull.
- Differential Calculus. Todhunter, Williamson, Edwards.
- Integral Calculus. Todhunter, Williamson, Roberts.
- Differential and Integral Calculus. Greenhill.
- Roulettes and Glisettes. Besant.
- Elementary Elliptic Functions. Glaisher, Greenhill.
- Trilinear Co-ordinates. Ferrers, Price, Whitworth.

Anharmonics, the Straight Line and Circle. Chasles.

Anharmonics—Conic Sections. Chasles.

Higher Plane Curves. Salmon.

Coordonnées Curvilignes. Lamé.

Solid Geometry. Aldis, C. Smith, Frost, Salmon,
Monge.

Examples of the Differential and Integral Calculus.
Gregory.

Differential Equations. Forsyth, Woolsey John-
son, Hymers, P. Mansion.

Partielle Differential-Gleichungen. Riemann.

Finite Differences. Boole, Pearson, Hymers.

Calculus of Operations. Carmichael.

Theory of Equations. Todhunter, Burnside and
Panton.

Higher Algebra. Salmon, Serret.

Theorie der Functionen. Durége, Weierstrass,
Biermann.

Substitutionen-Theorie. Netto, Jordan, Klein.

Calculus of Variations. Todhunter's Integral
Calculus, Strauch, Jellett, Carl, Todhunter's
History.

Determinants. Dostor, Muir, Scott, Dodgson.

Theory of Numbers. Barlow, le Besgue, Desmarest.

Ausdehnungslehre. Grassman, Schlegel.

Spherical Trigonometry. Todhunter, M'Clelland
and Preston.

Statics. Todhunter, Minchin, Moigno, Routh.

Screws. Ball.

Dynamics. Besant, Tait and Steele.

Rigid Dynamics. Routh.

- Mechanical Problems. Walton.
- Mécanique Rationnelle. Laurent.
- Hydromechanics. Besant.
- Capillarity. Poisson, Mathieu, Maxwell in the
British Cyclopædia.
- Hydromechanics, Elementary and Advanced.
Basset.
- Motion of Fluids. Lamb, Neumann.
- Tides and Waves. Airy.
- Sound and Vibrations. Lord Raleigh, Donkin.
- Optics. Parkinson, Heath, C. Pendlebury,
Croullebois, Mascart.
- Astronomy. Godfray, Hymers, Main, Loomis,
Chauvenet.
- Book of Problems. Wolstenholme.
- Lunar Theory. Godfray.
- Planetary Theory. Cheyne.
- Undulatory Theory. Airy, Lloyd, Glazebrook.
- Optique Physique. Billet.
- Répertoire d'Optique Moderne. Moigno.
- Figure of the Earth. Pratt.
- Spherical Harmonics. Ferrers, Todhunter, Thom-
son and Tait, Maxwell.
- Handbuch der Kugelfunctionen. Heine.
- Traité de la Chaleur. Briot.
- Electricity. Maxwell, Mascart et Joubert, Watson
and Burbury, Chrystal, Gerard, Wiedemann,
Mathieu.
- Magnetism. Airy, Lloyd.
- Thermodynamics. Tait, Baynes, Clausius, St
Robert, Zeuner.

- Kinetic Theory of Gases. Watson.
- Théorie Mathématique de l'élasticité des corps.
Lamé, Mathieu.
- Elasticität. Clebsch.
- Theory of Errors. Airy, Liagre, Faa de Bruno.
- Méthode des Moindres Carrés. Gauss, translated
into French by Bertrand.
- Theory of Differential Equations. Forsyth.
- Elliptic Functions. Halphen, Cayley, Durége,
Briot et Bouquet, Enneper, C. Neumann,
Weber.
- Quaternions. Tait, Kelland, Sir W. Hamilton.
- Calcul Différentiel et Intégral. Bertrand, Serret,
Moigno.
- Compendium der höheren Analysis. Schlömilch.
- Courbes dans l'espace, et courbes tracées sur une
surface. L'Abbé Aoust.
- Théorie Générale des Surfaces. Darboux.
- Natural Philosophy. Thomson and Tait.
- Théorie Nouvelle de la Rotation des corps. Poinso.
- Mécanique. Poisson, Collignon, Duhamel.
- Cours d'Analyse. Duhamel, Jordan.
- Mécanique Générale. Resal (7 volumes).
- Traité de la Chaleur. Fourier, Poisson.
- Principien der Mathematischen Physik. Wand.
- Œuvres. Verdet.
- Green's Papers, edited by Ferrers.
- Collected Papers. Cayley, Sir G. G. Stokes, Sir
W. Thomson.
- Dynamique. Mathieu.
- Vorlesungen über Dynamik. Jacobi.

Cours de Physique. Mathieu.

Vorlesungen über Mathematische Physik. Kirchhoff.

Exercices. Cauchy (4 volumes).

Système du Monde. Pontécoulant.

Mécanique Analytique. Lagrange.

Mécanique Céleste. Laplace.

The Principia. Sir Isaac Newton.

CLASSICAL TRIPOS.

Introductory Remarks.

So far from Sir W. Hamilton's statement being true at the present time, that "the University of Cambridge holds out not only a special but a paramount, not to say an exclusive, encouragement to the mathematical sciences," it is much more true to assert that *more encouragement is given at Cambridge to the Classical student than to the Mathematical, not only in prizes, scholarships, and temporary rewards of various kinds, but also in the most solid and lasting rewards the University can bestow.*

The grounds on which this high value has been set upon Classical study as an instrument of education are ably stated by Donaldson in his work on *Classical Scholarship and Classical Learning*, pp. 94—98, by W. G. Clark, late Public Orator of the University, in an *Essay on Classical Education*, contributed to the Cambridge Essays of 1855, and by Arnold in the *Quarterly Journal of Education*

for 1834 and 1835. See also Arnold's *Sermons*, Vol. III. Introduction, p. xii, and his *Lectures on Modern History*, pp. 123; 143. J. S. Mill's *Inaugural Address at St Andrews*, 1867, pp. 22—38 also, and Nettleship's *True aim of Classical Education* contain some valuable remarks on Classical study.

Classical studies may be regarded either as an instrument of education or a source of knowledge.

As a means of educating and strengthening the reasoning powers, their chief advantage lies in the dependence of the reasoning faculty upon language as its instrument. In order to perform any logical process correctly, the habit and faculty of analysing language and tracing the etymology of terms is most necessary. See Mill's *Logic*, Book I. chap. 1. The exercises of the University Classical examinations in translating the more difficult Greek and Latin writers from the original into English, or in the reverse process of translating English authors into Greek or Latin, call the student's powers of mind into play in the most complete and rigorous manner. The exact point of view from which the writer to be interpreted regards his subject must be seized, the line of thought and reasoning followed, the various interpretations which offer themselves considered, grammatical rules must be applied correctly, the memory must be ransacked for passages which will serve for illustration or elucidation, and the whole evidence summed up in order to arrive at the right meaning

of the passage under consideration. When the meaning has been satisfactorily determined, the student's power of expression, the copiousness of his vocabulary, his skill in weighing the value of words, and his taste in discriminating between their various shades of meaning, have all to be called into action in order to produce a forcible and, at the same time, an accurate version of his author. A long and careful training in accuracy both of thought and expression is necessary in order to ensure the performance of this complicated process with rapidity and ease.

As a source of knowledge the advantages of a study of the Classics are no less admirable.

The mind of the student is brought into contact with the thoughts of the greatest philosophers, historians, poets, and orators the world ever produced. He is constantly employed in hearing the most important questions of philosophy and politics discussed by the wisest of men, in studying the grandest truths expressed in the most perfect forms of speech, and in learning the experience of past times from the pages of the most masterly of historians. He thus becomes capable of judging by a high intellectual standard, his knowledge is enlarged, his taste cultivated, and his judgment matured. Add to this, that having thoroughly mastered the grammatical principles upon which the most delicate and expressive of languages are constructed, he gains a master-key by which to unlock the treasures of the noblest European lan-

guages. The literature of England and of other European nations, being grounded and framed upon Greek and Latin models, cannot be thoroughly understood except by the Classical scholar.

The indispensable necessity of a knowledge of Classics to the Theological student need hardly be pointed out.

In the great public schools the Classical teaching in the lower forms is mainly directed to the acquirement of a perfect acquaintance with elementary Greek and Latin grammar by incessant practice in exercises both prose and verse, and by *vivâ voce* construing, accompanied with catechetical instruction. Large portions of the best authors are also learnt by heart. In the lower classes parts of Virgil, Cæsar, Horace, Ovid, Cicero, Livy, Homer, Euripides, and Xenophon are read. The amount of these authors required is increased in the higher classes, and some of the more difficult authors, as Sophocles, Thucydides, Æschylus, Juvenal and Tacitus, are added. In the highest class Plato, Aristotle, Pindar, Aristophanes, and Plautus are occasionally studied, and the range of subjects includes from time to time portions of most of the authors read at Cambridge for the Classical Tripos Examination. Three points in the method of training adopted by the English public schools deserve especial mention, as they contribute most materially to the formation of good scholars for the Universities. The first of these is the strict enforcement of a knowledge of grammatical inflec-

tions and constructions. Such knowledge, unless acquired early, can seldom become sufficiently familiar to the mind of the student to enable him to apply the rules of grammar with ease and accuracy in writing Latin and Greek. A second invaluable means of training the future scholar is the constant learning by heart and repetition of large portions of standard writers in Greek, Latin, and English. This may be said to be the surest method of laying the foundation for excellence in the composition of Latin and Greek. A third point is the writing of original exercises in verse and prose on set subjects, as well as translations from English into Latin and Greek. The practice of the best schools has always been in favour of original exercises in Latin and Greek as well as translations from English. The reason of this is no doubt that boys are thus led to study the Greek and Latin authors for themselves, with the view of gleaning constructions and expressions from them, and learn to catch the living spirit of the author whose style they wish to copy. On the other hand, in making translations, the boy refers to dictionaries alone for his vocabulary, and to grammars for his constructions, and the result is, as may be imagined, stiff and lifeless. A sparing use should therefore be made at schools of such books as Holden's *Foliorum Silvula* and *Centuriæ*, and Kennedy's *Selections for Translations*, and subjects should be set for original composition, with hints, which will lead the pupil to seek help from

the classical authors themselves¹. A caution may here be added against the adoption of too wide a range in the authors studied before coming to the University. It is far better for a youth to come to College totally unversed in such authors as Plautus, Lucretius, Pindar, Theocritus, and Aristotle, than to have gained a smattering of these to the neglect of Virgil, Horace, Livy, Euripides, and Thucydides. The amount of reading brought by the student to the University is of minor importance, provided that he has been trained to habits of strict accuracy and to the exercise of his reasoning faculties as well as his memory. An occasional visit to the University and personal conference with the tutors and examiners of their former pupils would be very useful to the masters of minor schools in learning how to direct their teaching. In the larger public schools this intercourse is

¹ The following remarks from Mr Nettleship's admirable pamphlet on *The true aim of Classical Education* confirm the view above stated. "The practice of giving two or three comparatively short pieces of English in the week for translation into Greek or Latin has the effect, in the case of older boys, of unnecessarily dividing the attention, and of concentrating the mind both of teacher and pupil too much upon minutiae of language while it does little for originality and nothing for research or power of treatment. In order to develop an intelligent boy's capacity in the latter respect, one long original exercise in the week whether in verse or prose would probably be more efficient. This arrangement would leave the boys time for thought and research, which should be directed by the teacher."

constantly kept up by the addition of younger men to the staff of masters, who bring with them an intimate acquaintance with the requirements of University Examinations.

The above remarks on the teaching of Classics in schools may be excused by the fact that in no Examination so much as in the Classical Tripos are the effects of early training manifested. We have therefore indicated the chief points of the method pursued in the best public schools for laying the foundation of future excellence in scholarship.

The student who has enjoyed the advantages of an education at a good public school, will generally be able to judge for himself, to a certain extent, as to the direction of his studies at the University, and will probably have able advisers to aid him when in doubt. Our object will therefore be rather to address the student who has no such advantages, and to point out the best way in which he can remedy his defects, and the course of study he must pursue in order to compete with success for Classical Honours.

It is assumed that a moderate knowledge of the Classical writers usually read in schools and enumerated above has been acquired.

The regulations for the Classical Tripos Examination will be found *in extenso* printed in the Cambridge Calendar for 1890, pp. 31—34 and pp. 43—48.

The Examination is now divided into two parts,

the first of which is intended chiefly to test a student's knowledge of the Greek and Latin languages as languages, and the second his knowledge of the information which the principal Greek and Latin authors convey.

*The First Part of the Classical Tripos
Examination.*

This consists of four papers in Composition, one from English into Latin Prose, one from English into Greek Prose, one from English into Latin Verse, and one from English into Greek Verse. These will be set on the mornings of four days for three hours each. There will also be four papers of questions such as may fairly be set to Students who have not yet acquired a special knowledge of the subjects of the second Classical Examination. Each of these papers will be set for one hour and a half. The first will contain questions on Greek history, literature, and antiquities, the second on Roman history, literature, and antiquities, the third on Greek grammar and criticism, and the fourth on Latin grammar and criticism.

Five papers will also be set containing passages for translation from the best Greek and Latin authors together with questions arising immediately out of any such passages. Among these passages there are not to be any which require a special and technical knowledge of the subjects of the second part of the Examination. Students may be candidates for honours in the first part of the Classical

Tripes Examination in their fifth term (see Grace of Senate passed on May 29, 1879. *Reporter*, No. 291, p. 596), but not after their tenth term. Students who pass the first part of the Classical Tripes Examination in their second year before their eighth term are excused the General Examination for the B.A. degree. In order to be able to take the B.A. degree such a student will have to pass one of the special examinations for the ordinary degree, or the second part of the Classical Tripes, or one of the other tripes examinations. Students who pass the first part of the Classical Tripes Examination not earlier than their eighth term, are entitled to the B.A. degree if they have kept the requisite number of terms. The examination is fixed to commence on the Monday after the last Sunday but one in May.

Composition Papers.

On the papers of composition in the first part of the Classical Tripes Examination the following remarks may be made.

The term Composition is used at Cambridge to denote the translation of English into Latin or Greek, and the term Translation, to denote the reverse process of turning Latin or Greek into English.

Grammatical accuracy, simplicity and elegance of style, are the points chiefly to be attended to in Composition. With regard to the first, constant practice ripened into habitual precision can alone be relied upon. The others must be acquired by

close observation and extensive reading, which alone can familiarize the mind with the modes of thought and expression of the classical writers. The process of translation from English into Greek or Latin involves the recasting of each sentence, and the presentation of the thought in the shape in which an ancient author would have presented it. A comparison of the original text with Davies and Vaughan's translation of the *Republic* of Plato, or Wright's translation of the *Phædrus*, or Church and Brodribb's translation of Tacitus, or Jebb's translations of Theophrastus and Sophocles, will shew the degree of accuracy required in Prose Composition. Admirable models of Verse Composition will be found in the *Arundines Cami*, the *Sabrinæ Corolla*, the Porson Prize Exercises, and some of the other similar books. Specimens of Translation and Composition are given in a book by Messrs Jebb, Jackson, and Currey. In order to gain the habit of using the vocabulary of an author and storing it up in the memory, that kind of composition should be practised which corresponds to the writings of the author the student is engaged in reading at the time, and before doing an exercise in Composition, a portion of some author similar in style should be read over. The more difficult usages of the Greek and Latin languages, especially the doctrine of the subjunctive mood in Latin, and of conditional and temporal sentences in Greek, and the usages of particles, should be studied with the help of a good Syntax,

such as Roby's, Madvig's or Goodwin's, in order that the student may thoroughly understand them, and may be able to use them without fear of error.

In Verse Composition it is difficult to gain much skill unless it has been acquired early.

A special aid is given in most of the Colleges to the subject of Composition, and the student will have ample opportunities of practice afforded him.

The student who has not the advantage either of College aid or a private tutor, may exercise himself in Composition by translating and retranslating easy passages from Greek and Latin authors, especially Cicero, Livy, Thucydides, and Plato, and by the use of books of verse translations, such as those above named.

Composition should be practised sometimes with, and sometimes without, the aid of Dictionaries. On the one hand much valuable information may be gained by searching for words and expressions in a good Dictionary, and on the other it is absolutely necessary to acquire the habit of self-reliance, as no such aid is allowed in Examinations.

The remarks made above with regard to school-teaching in Composition do not apply to University practice for the Classical Tripos, the preparation for which should generally be confined to rendering passages of English into Greek or Latin. The collections of passages for this purpose contained in Holden's *Foliorum Silvula* and *Centuriæ* and in Kennedy's *Materials for Translation*, or in other books of a similar kind, will be found most use-

ful. Portions of Virgil, Ovid, Horace, Cicero, Thucydides, and Sophocles should be committed to memory, especially such as strike the mind most in reading.

The question whether the student can spend his time with advantage in writing for the University or College Composition Prizes depends mainly upon the circumstances of each particular case, and upon individual tastes. As, on the one hand, a student who comes to the University with a considerable knowledge of the Classical writers, and a facility for composing, may very profitably employ some portion of his time in writing for prizes ; so, on the other hand, it would be injudicious for one who has not had early opportunities for gaining the power of composition, or whose tastes do not lead him in that direction, and who must consequently rely mainly upon extensive reading and exact translation for success, to sacrifice any important part of his studies to such an object. But it may very possibly happen that a subject proposed may fall in with the reading or the taste of the student, and in such a case much interest may be added to his studies by writing upon it, besides the advantages which must always accompany the expression of his thoughts distinctly in writing. Much attention should be paid to the proper arrangement and treatment of the subject, a point in which, now that original Composition is so much less practised than formerly, students are apt to fail. Formal and irrelevant introductions

should be especially avoided, and the subject entered upon at once. Compression of matter, simplicity and perfection of style should be aimed at rather than length, and care must be taken to avoid all extravagance of thought or expression. The successful exercises are always printed, and collections of them may be easily procured in Cambridge. The student should, however, carefully avoid the danger of forming his style upon them, as they are not all by any means worthy of imitation. Recourse must rather be had to the ancient authors themselves, and their spirit and style reproduced as much as possible. In the case of the Greek Ode it is true that no exact model, except the very few fragments of Sappho, exists in ancient literature. Pindar therefore must be studied, and his method of expression and treatment of a subject noted and imitated. Full information on the metre and dialect of Sappho's Odes may be found in page 12 of an Essay on the fragments of her poetry, published at Berlin in 1827 by Professor Neue.

It may be mentioned here that it is often the custom for classical students who require practice in Examinations to enter the Examinations for the University Scholarships. The advantages to be derived from this are great, if the student is resolved to give his whole time and attention, while the Examination lasts, to the work of solving the papers. The power of concentrating all the faculties of the mind upon a difficulty, of quickly unravelling in

tricacies of language, and of composing with facility, will be much strengthened by such practice. The Examinations for the University Scholarships and those for the Chancellor's Medals, differ from the Classical Tripos Examination chiefly in the superior value attached in them to Composition, and in the original exercises in Verse and Prose required. There is also more variety in the authors from whom passages for translation are selected.

1. *Latin Verse Composition.*

The Examination Papers in Latin Verse Composition generally contain two kinds of Verse. Hexameters and Lyrics are most commonly set together, but sometimes other combinations of Hexameters, Elegiacs, and Lyrics are introduced. Abundant models of these may be found in the *Arundines Cami*, the *Sabrinæ Corolla*, and in Merivale's translation of Keats's *Hyperion*, or Jebb's or Munro's Greek and Latin Translations. But it cannot be too strongly urged on the student not to trust to such books alone, as *they cannot supply the place of an actual study of the Latin Poets.*

In the case of Lyric Verse the metre is generally left to the taste of the student. The Odes of Horace are the accepted models of this kind of Composition, but the metres used by Catullus are also of great beauty, and deserve careful attention. As a general rule, unless the student is highly skilled in composition, the Alcaic metre should be avoided on account of its peculiar difficulties. The Asclepiad metres

of Horace, and some of those used by him in his Epodes, especially those of the 15th and 16th Epodes, will be found the most generally useful. The Sapphic metre should be avoided, since unless very skilfully handled it becomes intolerably monotonous. In order to cultivate the ear and accustom it to the rhythm of the various metres, portions of the best Latin poets should be committed to memory, and passages of English poetry of similar style should be selected and translated at the same time, in order that the student may accustom himself to make a ready use of the Latin poetical vocabulary, and to imitate the rhythm.

2. *Latin Prose Composition.*

Two passages of English prose are generally given to be rendered into Latin, one from some standard English Historian, the other from some English philosophical work. In the composition of historical Latin prose, Livy is the best model; and it will be found useful to translate and re-translate portions of his history. The style of Tacitus, if imitated without the careful superintendence of a tutor, is apt to lead to affectation and mannerism in writing Latin Prose. For practice in the other kinds of Latin Prose, the philosophical, rhetorical, and epistolary, Cicero's *Tusculan Disputations*, his *De Officiis*, his *De Oratore*, his *Orations*, and his *Letters*, must be studied. The methods by which these writers render their meaning perspicuous, the order in which they

arrange their words, the forms of construction they generally prefer, and the particles used by them in the connexion of sentences, must be particularly noted. Forcellini's Lexicon and Madvig's or Roby's Latin Grammar may be consulted with great advantage.

To be able to write in a simple and clear yet idiomatic style in Latin Prose, is perhaps the most difficult attainment to which a student can aspire, and is but rarely found even amongst the most advanced scholars. The most common faults into which young students are apt to fall are those of mannerism, and its opposite of dull uniformity. The latter fault is certainly the less pardonable in those who have to any extent studied the lively style of the best writers of the Augustan age, but it is nevertheless by far the more prevalent.

3. *Greek Verse Composition.*

The metre required in the Greek Verse Composition Paper is generally the Iambic Senarius, with the addition occasionally of some short passage for translation into Greek Elegiacs, Anapæstic Dimeters, Trochaic Tetrameters, or Homeric Hexameters. The passages are generally taken from the English dramatic writers, but sometimes also from Milton, Spenser, and more modern poets. The rhythm and style of versification of Sophocles are generally considered the most worthy of imitation. Euripides and Æschylus should however be studied in order to acquire a sufficient *copia ver-*

borum. Parts of one or two plays, according to the student's fancy, should be committed to memory.

The attention of the student and most of his practice must be devoted to Iambics, and the other metres should be attempted but seldom. Excellent models of Greek Verse Composition will be found in the Porson Prize Exercises, and in the *Sabrinæ Corolla*. A useful account of the Iambic metre and some practical hints concerning it, with progressive exercises, is to be found in the introduction to the *Shrewsbury Greek Verses*.

4. *Greek Prose Composition.*

As in the Latin, so in the Greek Prose Composition Paper, two passages of English are generally given to be rendered into Greek. These passages are sometimes purely narrative, sometimes oratorical, and sometimes philosophical. The styles of Thucydides and Demosthenes, and of Plato must be severally cultivated. The copious and varied phraseology of Plato, and his delicate shades of expression, must be carefully noted and applied.

With beginners in Greek Prose Composition it is a common error to suppose that the rules of Latin Prose apply to Greek, especially in the order of words, in the use of the relative pronoun, of participles, and of the genitive absolute or the ablative case. The difference between Latin and Greek in these respects must therefore be attended to. Perfection in this kind of composition can only be

gained by wide and continuous reading of large masses of the best Greek Prose authors, but it is perhaps the most attainable of all the kinds of Composition, by those who have not had the advantage of good early training, and therefore should be carefully cultivated by such students.

Translation Papers.

The translations are required to be strictly literal, so far as is consistent with elegant and idiomatic English. The translation of the *Republic* of Plato by Davies and Vaughan, or that of the *Phædrus* of Plato by Wright, or of the *Oration against Aphobus* by Kennedy, or of the poem of *Lucretius* by Munro, or of the *Histories and Annals of Tacitus* by Church and Brodribb, or of *Theophrastus and Sophocles* by Jebb, or the book of translations by Jebb, Jackson and Currey, may be taken as examples of the best style of rendering. For translating the Prose writers, the student requires a copious vocabulary, and some knowledge of the styles of the best English authors of history and philosophy. In the translation of poetry it is not generally advisable to attempt rhymes or a metrical version. As was remarked in the case of Composition, the object here should be to present the sense of the whole passage in an English form. All affectation or forced imitation of the peculiarities of any English writer should be avoided, and the translation made to flow as naturally as

possible. In endeavouring to discover the true meaning of any difficult passage, the student must be careful to determine not only the strict grammatical construction and usage of each of the words, but also to avail himself of the sense indicated by the preceding and following context: by applying both of these methods of arriving at the interpretation, many passages which would prove unintelligible, were one method alone used, will be made clear. Constant practice in Translation is not so necessary as careful and extensive reading, and the acquirement of a copious English vocabulary; but for a few weeks previous to Examination practice should be constantly kept up, by means of College Examinations or by the help of a private tutor, in translating difficult passages separated from their context, in order to acquire quickness in seizing the writer's train of thought and to gain a readiness of expression. Before beginning to write each passage should be carefully read over two or three times, the drift of the whole clearly seen, and the point of each sentence and its bearing upon the subject carefully considered.

Particular attention should be paid to the first few sentences in each passage, as mistakes are very liable to be made in them from want of the clue furnished by the previous context. An effort must be made to comprehend the exact point from which the writer has viewed his subject, to perceive clearly the connexion of thought, and the structure of each sentence, and to express the particular

shade of meaning in each word as modified by its context.

In reading an author it must always be remembered that the object to be kept in view is not so much to load the memory with interpretations of difficult passages, or the meaning of uncommon words, as to familiarize the mind with the language and mode of expression, and to gain such a power of unravelling intricate and abstruse trains of thought, as shall enable the student to translate with facility and accuracy detached passages which he has not read previously.

A scholar of extensive reading will often find that he has not previously seen many of the passages given in an Examination, and therefore the student must read, not with the immediate prospect of finding the same passages in the Examination, but in order to accustom his faculties to the strain of making out the meaning of hard passages without the aid of notes or a dictionary. For this reason it is not well to lean too much upon the assistance of notes or translations, except in the case of recondite allusions, or in confirmation of an opinion previously formed from the text alone. The student is recommended in reading to have two copies of his author, one containing the text alone, the other with explanatory notes, or a translation. The text alone should be first read with a dictionary and grammar, and any difficulties which seem insurmountable, grammatical peculiarities, or allusions, marked with a pencil. Many of these will probably

be explained in further reading by subsequent passages, but for such as remain unsolved a translation or notes may be used.

Much assistance in learning how to translate may be derived from lectures. For this purpose the student should carefully remark the method of translation used by a University Professor, or by his College lecturer, who will generally be a tutor of considerable experience, and endeavour to imitate it. The lectures of the Greek and Latin Professors may be attended with great advantage to the student, not only for the amount of information to be gained, but also as a means of forming a good style in translation.

Questions on the subject-matter, and on the more important points of philology involved in the passages given for translation, are attached to the papers. These must be prepared for by careful study of the history and philology connected with each author. The candidate should however always finish the translations before attempting any of the questions. On this point, and in appending notes to his translations, the student must exercise his own judgment, as it is impossible to give any rules which will apply to all cases. In the following directions the books which are particularly recommended are marked with an asterisk.

1. *Latin Prose Translations.*

The authors from whose works passages will probably be taken for Examination in Latin Prose

Translation are Livy, Cicero, Tacitus, Cæsar, Sallust, Suetonius, Pliny the elder, Pliny the younger, Quintilian, Velleius Paterculus, Seneca the philosopher, and Cornelius Nepos.

The authors of most importance among these with regard to the Examination are Livy, Cicero, and Tacitus.

The parts of *Livy* most generally read are the first Decad and the 21st and 22nd books. Arnold's or Schwegler's (German), or Ihne's or Mommsen's history should be read at the same time. The early history of Rome is most completely discussed in Sir G. C. Lewis's work on *The Credibility of Early Roman History*. The opposite view may be seen in Dyer's *History of the Roman Kings*, but perhaps the most fair and lucid statement of the various questions which arise is to be found in Ihne's *Roman History*. The best annotated edition of Livy is Drakenborch's, but his notes are too cumbrous for general use. Madvig's text, and Weissenborn's (German) notes, will be found most convenient. Bekker's text with short notes by Raschig is also a convenient edition. An excellent edition of the first Book of Livy with notes and a valuable introduction has been published by Professor Seeley, and a treatise on Livy's style by Kuhnast may be found useful to those who can read German.

The text of *Cicero* by Nobbe, or Klotz, or Baiter and Kayser, should be used; Ernesti's *Clavis* or Nizolius' *Lexicon Ciceronianum* is a useful book. The following will be found, with *Zeller's *Epicu-*

reans, Stoics, and Sceptics, useful annotated editions of the separate works usually read. *Madvig's *De Finibus*, Kühner's *Tusculanæ Disputationes*, the German editions of Cicero's works in Weidmann's Berlin series, Görenz's *Academica*, *Halm's *Orationes*, Beier's *De Officiis*, Ellendt's *De Oratore*, Moser and Creuzer's or *Mayor's *De Nat. Deor.*, Mayor's *Second Philippic*, Ramsay's *Pro. Cluentio*, the Commentary of *Paulus Manutius on the Epistles, or Billerbeck or Boot's editions, or Hofmann and Andresen's selections (German), Stinner's pamphlet on the style of Cicero's letters, Oppeln, 1879. The whole of the orations have also been edited with notes in the *Bibliotheca Classica*. Abeken's *Life and Letters of Cicero*, Middleton's or Forsyth's *Life of Cicero*, Watson's select *Letters of Cicero*, and Whewell's *Lectures on the History of Cicero's Philosophy*, may also be read with advantage.

The best annotated edition of *Tacitus* is that of *Orelli. Jacob's (French), Hachette, Paris, and Nipperdey's (German), notes are good. The translation of Church and Brodrigg is useful, though not to be implicitly relied on. The parts of Tacitus most generally read are the first few books and the 13th and 14th of the *Annals*, and the first two books of the *History*, and the *Agricola* and *Germany*. Merivale's *History of the Roman Empire* should be read *pari passu* with this author. Boetticher's *Lexicon Taciteum* and Dräger's treatise on the syntax and style of Tacitus are also useful. An edition of the *Annals* with notes has been

published by Frost. The best text is that of Halm published by Teubner in 1876. Gantrelle's, *Style de Tacite*, Garnier, Paris, 1874, is useful.

2. *Latin Verse Translations.*

The authors in this division from whom passages may probably be proposed for Examination are very numerous, comprising Lucretius, Catullus, Virgil, Horace, Ovid, Juvenal, Propertius, Tibullus, Persius, Martial, Lucan, Statius, Ennius, Phædrus, Plautus and Terence. Portions of all these writers, except Phædrus, Statius, Ennius and Tibullus, must be studied. The most important are Plautus, Lucretius, Virgil, Horace, and Juvenal. Two or three books of Lucretius and a few plays of Plautus should be known, and if possible the whole of Virgil, Horace, and Juvenal. The best texts of the two first-named authors are Munro's Lucretius, and Ritschl's or Fleckeisen's Plautus. The notes of Lindemann or Gronovius or Lambinus on Plautus, Conington's or Forbiger's Virgil, *Orelli's Horace, *Mayor's Juvenal, and *Munro's or *Lachmann's Lucretius, should be used. Thornton's translation of Plautus is useful, and Pareus' *Lexicon Plautinum*. On the metres of Plautus and Terence, a subject of some difficulty, Ritschl's prolegomena to the *Trinummus*, Wagner's prefaces to the *Aulularia* and to his edition of Terence, and Bentley's introduction to Terence, are the best authorities. With respect to the remaining authors the most commonly studied parts of Ovid are the *Fasti* and *Heroides*. The best

annotated editions of the *Fasti* are Merkel's and Paley's. Conington's or *Jahn's *Persius*, Hertzberg's *Propertius*, Doering's *Catullus*, Weber's or Weise's *Lucan*, and Wagner's *Terence*, will be found useful. The notes on *Martial's Epigrams* in the common *variorum* edition should be used. An edition of selected epigrams with notes has also been published by Paley and Stone. The whole of *Propertius*, *Catullus*, and *Persius*, may be read. The first book of *Lucan's Pharsalia* is the most worth reading. The fragments of *Ennius* have lately been edited in a collected form by Vahlen.

3. *Greek Prose Translations.*

A greater extent of reading is necessary in Greek than in Latin Prose. The Greek Prose authors from whose writings passages have hitherto been extracted for Classical Examinations have been *Herodotus*, *Thucydides*, *Xenophon*, *Demosthenes* and the other Attic orators, *Plato*, *Aristotle*, *Theophrastus*, and *Longinus*.

The most important of these authors to the candidate for Classical Honours is *Thucydides*. To appreciate and thoroughly understand this prince of historians requires no mean amount of Greek scholarship. The best annotated edition is **Poppo's* smaller edition, *Arnold's* edition is valuable for the historical and geographical remarks contained in the notes, and *Göller's* and *Krüger's* (German) editions for the grammatical observations and parallel passages quoted in them. *Bloomfield's* edition is useful

only for the quotations in the notes from later authors who have imitated Thucydides. Some excellent grammatical notes on the first book of Thucydides have been published by Mr Shilleto. There are several translations of Thucydides into English, but none which can be entirely relied upon for scholarlike accuracy. The versions of Hobbes and Dale are the best. *Grote's, Thirlwall's, or Curtius' *History of Greece* should always be read *pari passu* as most valuable historical commentaries on Thucydides. The difficulties to be encountered by the student in translating this author are such as will try his scholarship and powers of comprehension and expression to the utmost, and these difficulties do not occur less frequently in the narrative than in the speeches. The student should therefore on no account be induced to believe that it is only necessary to read the speeches in Thucydides, as is sometimes imagined.

The best annotations on *Herodotus* are those of Krüger and Abicht (German) and Bähr, Gaisford, or Schweighauser. One of these, with the text of Bekker, and Rawlinson's translation and notes, will be found sufficient. A good deal of information and criticism relating to this author will be found in Dahlmann's *Life of Herodotus*, *Mure's *History of Greek Literature*, and Grote's *History of Greece*.

The following orations of Demosthenes are commonly read. The *De Falsa Legatione*, with *Shilleto's notes, the *Midias*, edited by *Buttmann, the *De Corona*, in Drake's edition, with the speech

of Æschines on the same subject, and a good translation published by Mr Norris, the orations against Aphobus, with an admirable translation and notes by *Kennedy, the *Androtion*, *Phormio*, *Zenothemis*, *Aristocrates*, and *Nicostratus*. Dindorf's collection of notes and Mitchell's Indices will be found useful. Sandys and Paley's Private Orations of Demosthenes with notes, may be recommended. Dr Sandys has also edited some of the longer speeches, especially the Leptines. The student should carefully observe the terms of Attic law occurring in the private orations. The necessary information on this subject will be found in Meier and Schömann's work on the method of procedure in the Attic courts. Arnold Schäfer's *Demosthenes und seine Zeit* contains an account of the circumstances under which each speech was delivered. It is not necessary to read any of the other Attic orators if Demosthenes be carefully studied.

Passages from the following dialogues of Plato may probably be set in the first part of the Classical Tripos Examination. The *Phædrus*, *Theætetus*, *Gorgias*, *Protagoras*, *Phædo*, *Apology*, *Sophistes*, *Politicus*. The *Phædrus* with *Wright's translation and *Thompson's notes, the *Theætetus* with Campbell's notes, the *Gorgias* with Cope's Introduction and translation, and with Stallbaum's and *Thompson's notes, the *Protagoras* and *Phædo* with Wagner's notes, the *Republic* with *Davies and Vaughan's translation, the *Apology* with Riddell's notes, the *Sophistes* and *Politicus* with Camp-

bell's notes. Some of the dialogues have been edited by Archer Hind. Some parts of the Rhetoric and Ethics of Aristotle may be set, but Aristotle will as a rule be reserved for the second examination.

The remaining Greek Prose writers, Xenophon, Theophrastus, and Longinus, are not of sufficient importance with reference to the Examination to occupy much of the student's time. An excellent edition of *Theophrastus with translations and notes has been published by Prof. Jebb.

4. *Greek Verse Translations.*

The authors from whose works passages of Greek Verse will probably be selected are Homer, Hesiod, Æschylus, Pindar, Sophocles, Euripides, Aristophanes, Theocritus, Bion, the Homeric Hymns, the Greek Anthology, and the Comic Fragments.

The parts of *Homer* usually read are the first six and the last six books of the Iliad, and from the 5th to the 12th Book of the Odyssey. In reading Homer explanatory notes are not so much required as a good Lexicon, the difficulty being chiefly in the meaning of words, and not in intricacy of construction. The most convenient notes on the Iliad are those in Heyne's smaller edition, published at Oxford in 1834; Dubner's French edition, the German edition of Fäsi, and Spitzner's or Bothe's or Paley's notes are also useful. Löwe's edition of the Odyssey is the most convenient, but the notes of Ameis (German) are much better. The notes of

*Nitzsch on the *Odyssey* have not been translated from the German, and extend over twelve books only. Prof. Mayor has edited the IX—XII books of the *Odyssey* with notes, and an English edition of the *Odyssey* has also been published by Dr Hayman. *Buttmann's *Lexilogus*, and his **Catalogue of Irregular Greek Verbs*, are invaluable for the student of Homer. Döderlein's *Homerisches Glossarium*, Seber's Index, and *Damm's *Lexicon Homericum*, are also very useful. The last serves as an index, and brings together all the passages in which a word occurs, so that the student can compare its different significations. The most complete and impartial discussion of the questions which relate to the Homeric poems will be found in *Mure's *History of Greek Literature*.

The poems of *Hesiod* have been lately edited by Dr Paley, and should be studied either in his edition or Van Lennep's. It is desirable that the student should become acquainted with them, as a knowledge of Homer will not always enable him to translate *Hesiod*.

Pindar should be studied with the aid of *Dissen's Notes, Bury's or Gildersleeve's or Fennell's edition. The style of translating Homer and Pindar should be as near as possible to that of the authorized version of the Old Testament Prophets. Butcher and Lang's version of the *Odyssey* is useful.

Paley's editions of *Æschylus* and *Euripides* are the most generally useful. The plays of most im-

portance are the *Agamemnon*, the *Prometheus Vinc-tus*, the *Eumenides*, the *Hecuba*, *Orestes*, and *Phœnissæ*, with Porson's notes, *Elmsley's *Medea* and Sandys' *Bacchæ*, the *Hippolytus*, *Alcestis*, *Ion*, *Andromache*, and *Helena*.

The whole of Sophocles ought to be read, with the notes of Wunder, Schneidewin or *Hermann; and the *Ajax* and *Electra*, with *Jebb's admirable notes and translation. Bishop Thirlwall's *Essay On the Irony of Sophocles*, in the *Philological Museum*, *Ellendt's *Lexicon Sophocleum*, and Campbell's *Introduction*, are extremely useful.

The most useful edition of Aristophanes is that of Bekker with the scholia and 'variorum' notes attached. The best text without notes is Meineke's published by Tauchnitz at Leipsic. Dindorf's text with scholia and notes is useful. The plays usually read are the *Vespæ*, the *Aves*, the *Ranæ*, the *Equites*, the *Nubes*, the *Pax*, and the *Acharnenses*. There are many good editions of single plays. Among these may be mentioned the *Vespæ* and *Pax* by Richter, the *Nubes* by Hermann, the *Nubes*, *Equites*, and *Ranæ*, by Kock (German), the *Lysistrata* and *Thesmophoriazusæ* by Enger. *Elmsley's edition of the *Acharnians* is excellent, and by no means out of date. Some admirable notes on the *Acharnians* by W. G. Clark have been printed in the *Cambridge Philological Journal*, 1879. Mitchell is better as a translator than as an editor, but deficient in scholarship. The best translations are those by *Frere and Walsh, and a translation of

the *Clouds*, published anonymously by Macpherson, Oxford, 1852.

The student should be well acquainted with the dialect and style of Theocritus. The best editions of his Idylls, with explanatory notes, are those of Wuestemann, Paley, and Fritzsche. The difficulty in this author, as in Homer, chiefly consists in determining the meaning of words, and not in complexity of construction.

It will be found best not to read more than two authors at the same time, even when the whole of the student's time can be devoted to them, and, during Term time when lectures have to be attended, one will be found quite sufficient if thoroughly studied and digested. The proposed course may be either shortened or lengthened considerably by varying the amount of each author read. While on the one hand some students will feel that they can make most progress by reading large masses of an author, others will be inclined to content themselves with a small amount thoroughly and familiarly known. The former plan, if too exclusively pursued, is apt to lead to inaccuracy, and the latter to narrow scholarship. The best course is to combine the two methods. Certain portions of the principal writers should be familiarly known, but large masses should also be read through continuously, in order to accustom the mind thoroughly to the modes of thought and style of the authors studied. Nothing should be so much guarded against as hasty and perfunctory

reading. For although a wide range of study will in many cases enable the student to enter into the spirit of the ancient writers more fully, yet it must always be borne in mind that the demand in the translation papers is not so much for wide knowledge as for practical skill in handling the languages, delicacy of taste in discerning their beauties, and accuracy in translating. It is here that the chief difference between the first and second parts of the Classical Tripos chiefly lies. In the first part scholarship is encouraged as distinguished from special learning. The main demand is for skill in interpreting, translating, and writing Greek, Latin, and English.

Special and technical learning cannot be expected from a student at the age at which the first examination of the Classical Tripos is proposed to him, and therefore the best educational test is that which requires a sound foundation for future acquirements to rest upon. The accurate scholar always has the power of acquiring extensive learning, while he who is not a good scholar can never attain to solid learning. But when accuracy of scholarship has been acquired, it is then most desirable that students should have wider ranges of study and research such as those proposed in the second examination opened to them, and should be encouraged to make use of the accomplishment they have acquired. Professor Smyth, in his first Lecture on History, has the following remarks upon this subject: "With respect to the Classical

writings of antiquity, I must digress for a moment to observe, that it is one thing to know their beauties and their difficult passages, and another to turn to our own advantage the information they contain. It is one thing to enrich our imagination and form our taste; it is another to draw from them the materials of our own reasonings, to enlarge our knowledge of human nature, and to give efficacy to our own labours by observing the images of the human mind as reflected in the mirrors of the past. He who is already a scholar should endeavour to be more; it is possible that he may be possessed of treasures which he is without the wish or the ability to use."

Question Papers.

For the papers of questions on Greek and Roman history, literature and antiquities the following standard works, besides those mentioned above under the head of translations, may be found useful.

Böckh's *Public Economy of Athens*, Schömann *de Comitibus Atheniensium*, Donaldson's *Cratylus* and *Varronianus*, Hand's *Tursellinus*, Müller's *History of Greek Literature*, Niebuhr's *Roman History and Lectures*, Bernhardt's *Grundriss der Griechischen und Lateinischen Literatur*, Teuffel's *History of Roman Literature*, Cruttwell's *History of Roman Literature*, Fischer's *Zeittafeln*, Clinton's *Fasti*, Veitch's *Irregular Greek Verbs*, Müller's *Dissertations on the Eumenides*, Donaldson's *Theatre of the Greeks*, Hermann's *Political Antiquities*, Merivale's

Fall of the Roman Republic. The Dictionaries of Antiquities, of Biography, and of Geography by Dr Smith. Wordsworth's *Athens and Attica*, Burn's *Rome and the Campagna*, and *Old Rome*. Dyer's *Pompeii*. Ramsay's *Roman Antiquities*. Rich's *Dictionary of Greek and Roman Antiquities*. Becker's *Römische Alterthümer*. The best Atlas is that of Spruner, or Kiepert's smaller one. The best Latin Grammars are Madvig's and Roby's, the best Greek Grammars Donaldson's, Goodwin's or Matthiæ's, with Madvig's Greek Syntax. The best Greek Lexicons are Rost and Palm, or Liddell and Scott. The best Latin Dictionary Forcellini's, or the smaller Dictionary of Lewis and Short, Oxford, 1879. Lexicons adapted to particular authors, if they can be had, such as Boetticher's or Gerber's *Lexicon Taciteum*, or Schweighäuser's *Lexicon Herodoteum*, should be used in preference to general Lexicons.

An excellent list of the best editions of classical authors will be found in J. B. Mayor's *Guide to the Choice of Classical Books*, Bell and Sons, and in Prof. Mayor's *Bibliographical Clue to Latin Literature*.

The Examiners are instructed to arrange the names of those who pass the above examination with credit in three classes, each class to consist of one or more divisions. Each division is to contain one or more names, and when more names than one are so contained they are to be arranged in alphabetical order.

Second Part of the Classical Tripos Examination.

A student may be a candidate for Honours in the Second Part of the Examination for the Classical Tripos, if at the time of such examination he be keeping his eighth term at least, having previously kept seven terms, provided that twelve complete terms shall not have passed after the first of the said seven terms. Provided further that he shall have already obtained honours in the first part of the Classical Tripos Examination.

No student may present himself for both parts of the examination for the Classical Tripos in the same year.

A student who shall pass the second part of the examination for the Classical Tripos not earlier than his eighth term at least, or later than his thirteenth term at most, is entitled to admission to the degree of Bachelor of Arts, provided that he has kept the requisite number of terms at the time when he applies for such degree.

The time for this examination to commence is fixed on the Monday after the last Sunday in May in each year.

The names of those students who pass the second part of the Classical Tripos Examination with credit are to be placed in three classes arranged in alphabetical order. Marks will be affixed to the names in the first class shewing the subjects in which the students have passed and also those in which they have passed with special distinction.

The second part of the Classical Tripos Examination is intended for those students who wish to shew a special and technical knowledge of some of the higher branches of classical learning. Such students therefore after having proved that they are sound scholars in Greek and Latin by passing the first part, and also section A in the second part of the Classical Tripos Examination, will be allowed to offer for examination one or two, but not more than two of four other sections of examination, viz. Philosophy, History, Archæology and Philology.

SECTION A.

Each candidate must therefore first offer himself for examination in Section A. This consists of four papers in higher classical scholarship, one in Latin prose composition, one in Greek prose composition, a third in translation from Latin into English, and a fourth in translation from Greek into English. These papers will be of greater difficulty than those set in the first part of the examination, but the remarks given above on translations and composition will apply to them, with the exception of those referring to verse composition, which is not included in section A.

The set subjects for Sections B, C, D and E, and the books recommended for the examination, will be found in the *Cambridge University Reporter*, in the Reports of the Classical Board always published in the May Term.

SECTION B. *Ancient Philosophy.*

In this section there are to be five papers of three hours each.

A list of selected works of Plato and Aristotle or of other authors is to be issued from time to time by the Classical Board, to be studied by candidates for Honours in this section. The selected books are not to be so numerous as to preclude the student from the general study of ancient philosophy.

One paper is to contain passages for translation selected from philosophical works, Greek or Latin or both, other than those appointed by the Board, together with questions on the subject-matter of such passages or arising out of them.

Three of the papers are to contain questions upon the works appointed by the Board, and also upon other ancient philosophical works, and upon ancient philosophy in general, with short passages for translation.

One paper is to consist of alternative subjects for an English Essay such as fairly to represent the field of work included in the section.

A candidate is not to be refused a place in the first class for the sole reason that he has omitted to study one or more of the appointed books.

For the study of Ancient Philosophy in general the following works may be used with advantage. Ritter and Preller's *Historia Philosophiæ ex fontium locis contexta*. Zeller's *Die Philosophie der*

Griechen. Ueberweg's *Outlines of Ancient Philosophy*, and Schwegler's *Geschichte der Griechischen Philosophie*. Dr Jackson's work on Plato.

The London edition of Plato's works published in 1826 by Valpy with variorum notes is serviceable.

Archer Butler's *Lectures on Ancient Philosophy* with Thompson's notes should be read, and the chapter in Grote's *Grecian History* upon the Sophists with Cope's and Sidgwick's criticisms upon it in the *Journal of Philology* and the *Journal of Classical and Sacred Philology*. Grote's *Plato and Companions of Socrates* with Mill's criticisms in his dissertations.

The books which have been generally used at Cambridge for the study of Aristotle have been Michelet's or Sir A. Grant's *Commentaries on the Ethics*, to which may be added H. Jackson's edition of the 5th book of the *Nicomachean Ethics*, Grote's and Lewes's *Aristotle* and Spengel's *Rhetoric of Aristotle* and Bonitz's *Metaphysics*.

Lists of other works on Plato and Aristotle and on ancient philosophy will be found in J. B. Mayor's *Guide to the Choice of Classical Books*.

SECTION C. *History.*

In this section there are to be five papers of three hours each.

One paper is to contain general questions on Greek and Roman history, political, constitutional, social and literary. References to ancient au-

thorities will be expected. From time to time the Board of Classical Studies is to determine the chronological limits of this paper.

One paper is to include questions on a special period of Greek History, to be determined from time to time by the Board of Classical Studies. Candidates will be expected to shew a knowledge of the ancient authorities by translating and interpreting passages from their works or from inscriptions.

One paper is to include questions on a special period of Roman History, in which candidates will be required to shew a knowledge of ancient authorities and inscriptions.

One paper is to contain questions on Greek and Roman Law in its historical development. The Board is to determine from time to time the chronological limits of these questions, and also to select certain ancient writings bearing upon Law from which passages will be set for explanation.

One paper is to contain alternative subjects for an English Essay representing the several departments of this section.

No candidate is to be refused a place in the first class for the sole reason that he has omitted to study one or more of the appointed books.

The special books which will have to be studied for section C will depend of course upon the periods marked out by the Classical Board. See *Cambridge University Reporter*. Lists of such books upon special parts of history, as well as of those in which the subject of ancient history is

treated generally, will be found in J. B. Mayor's *Guide to the Choice of Classical Books*, Bell and Sons. Books on Ancient Law are also mentioned in that Guide, p. 44.

For the Essay the following will be found useful. Conington's *Miscellaneous Works*. Sellar's *Roman Poets*. Nisard's *Poètes Latins*. Symond's *Studies of Greek Poets*.

1. The questions in the general paper on Greek and Roman History will be limited as follows: in Greek history to times not later than 146 B.C., in Roman history not later than 180 A.D.

2. (a) The general questions on Law will be limited, in the case of Greek law, to times not later than the death of Demosthenes; in that of Roman law, not later than the death of Augustus Cæsar.

(β) The ancient writings bearing upon law, upon which questions will be set in the Classical Tripos Examination are specified in the *Reporter*.

Books recommended for Section C.

It is only possible to indicate here the most important authorities on the general history of Greece and Rome. For the special periods as well as for the set subjects in Attic and Roman Law courses of lectures are arranged and the student must be guided by the advice of the Lecturers in his choice of books. In studying special periods he must not be content to read only the works of modern historians: his knowledge must be based

on the works of the original authorities. Inscriptions are often most important sources of information. The great collections of the Prussian Academy, *Corpus Inscriptionum Graecarum*, *Corpus Inscriptionum Atticarum*, *Corpus Inscriptionum Latinarum* should occasionally be consulted: for purposes of reference Hicks' *Manual of Greek Historical Inscriptions*, or Dittenberger's *Sylloge Inscriptionum Graecarum* and Wilmann's *Exempla Inscriptionum Latinarum* should be at hand.

In general history the following books are recommended as being most useful. It will usually be advisable to read the works of more than one modern author and to have some knowledge of the chief original authorities for the different periods, but it will not be necessary to read the whole of the larger histories.

GREEK HISTORY. Grote (the chapters on Athenian politics and the Peloponnesian war should undoubtedly be read, but the first three volumes are not so important), Curtius (translated by Dr A. W. Ward), and (in German) Holm's *Griechische Geschichte*. For early history Mr Evelyn Abbott's *History of Greece*, Part I., Duncker's *Greek History* (translated by Mr Abbott), and Busolt's *Griechische Geschichte* (which contains the most exhaustive collection of material).

For late history (after the death of Alexander) Thirlwall and Droysen (whose work has been translated into French).

ROMAN HISTORY. For the period of the Re-

public Mommsen's *Roman History* (translated by Dr Dickson) is most important. Thue's *History of Rome* may also be consulted.

For the period of the Empire, Merivale, Mommsen's *History of the Roman Provinces* and (in German) Schiller's *Geschichte der römischen Kaiserzeit*. Peter's *Chronological Tables* (which contain a summary of events and full references to the original authorities) should be in constant use. The Greek Tables have been translated by Mr Chawner; the Roman Tables can only be obtained in German.

GREEK CONSTITUTIONAL HISTORY AND LAW. The constitutions of the chief Greek states (and in particular those of Athens and Sparta) must be systematically studied with reference to the original authorities. Schömann's *Antiquities of the State* (translated by Hardy and Mann), Gilbert's *Griechische Staatsalterthümer (Erster Band)* and Busolt's *Griechische Staatsalterthümer* are most useful.

Much information in Greek history can be found in the newly-discovered '*History of the Constitution of Athens*' by Aristotle.

The encyclopædic work of Meier and Schömann, *Der attische Prozess*, contains all that is known on Attic Law.

ROMAN CONSTITUTIONAL HISTORY AND LAW. The most satisfactory text-book is in French. Willems, *Le Droit Public Romain*. Lange's *Römische Alterthümer* and Mommsen's *Römisches Staatsrecht* contain an exhaustive treatment of the subject.

FOR ROMAN LAW. Sir Henry Maine's *Ancient Law*. Muirhead's *Historical Introduction to Roman Law*, Keller's *Der römische Civilprozess*.

Much information both on constitutional and on legal questions may be obtained from Dr Smith's *Dictionary of Greek and Roman Antiquities*.

SECTION D. *Archæology.*

In this section there are to be five papers of three hours each.

1. One paper is to contain questions on the history of art and of the lives and works of artists in the ancient Greek and Roman world.

2. One paper is to be on (α) the mythologies and religious beliefs and (β) the religious usages and ceremonies of the ancient Greeks and Romans.

3. One paper is to be on a group or class of monuments or a special site or district of the ancient Greek or Roman world, to be from time to time determined upon by the Board of Classical Studies.

4. One paper is to be on the art and handicraft and the inscriptions of the ancient Greeks and Romans in relation to their national and domestic life.

In the above four papers knowledge of ancient authorities and of extant monuments will be tested. Passages for translation and inscriptions and representations of ancient monuments will be set for interpretation, identification and discussion.

5. One paper is to contain alternative subjects for an English Essay representing the departments of this section.

Lists of modern authorities on Archæology, and of portions of ancient writers recommended for study, are to be published from time to time by the Board of Classical Studies in the *Reporter*.

Distinction may be obtained in this section by a thorough knowledge of a part.

Lists of Books on Ancient Geography, Topography, Antiquities, Art, Mythology and Religion will be found in the *Cambridge University Reporter*, in the Report of the Classical Board in the May Term of each year.

The following modern books are recommended as indicating the general range of the subjects included in this section :

Müller K. O., Ancient Art and its Remains, with *Müller* and *Wieseler*, Denkmäler der alten Kunst. *Brunn*, Geschichte der griechischen Künstler. *Preller*, Griechische Mythologie, römische Mythologie. *Hermann K. F.*, Lehrbuch der griechischen Antiquitäten ed. Stark (Parts II. and III.). *Marquardt* and *Mommsen*, Handbuch der römischen Alterthümer (Parts VI. and VII.).—*Freund's* Triennium philologicum, Part VI., contains a general sketch of ancient art and of the materials for its study.

The following modern books are also recommended as useful for purposes of reference or special study :

For Paper (1). *Schnaase*, Geschichte der bildenden Künste, Vol. II. *Overbeck*, Geschichte der griech. Plastik. *Stark*, Handbuch der Archäologie der Kunst. *Woltmann* and *Woermann*, History of Painting, edited by Prof. Colvin. *Friederichs*, Berlins antike Bildwerke. *Helbig*, Campanische Wandmalerei. *Gerhard*, Auserlesene griechische Vasenbilder. *Jahn O.*, Münchener Vasensammlung (Preface). *Bötticher*, Die Tektonik der Hellenen. *Boutmy Em.*, Philosophie de l'Architecture. *Urlichs*, Skopas.

For Paper (2). *Murray A. S.*, Manual of Mythology. *Mauzy*, Histoire des Religions de la Grèce antique. *Mommsen A.*, Heortologie.

For Paper (3). *Wordsworth*, Athens and Attica. *Wachsmuth*, Die Stadt Athen. *Beulé*, l'Acropole d'Athènes. *Michaelis*, Der Parthenon. *Petersen*, Kunst des Phidias. *Lloyd W. W.*, The Age of Pericles. *Leake*, Topography of Athens. *Burn R.*, Rome and the Campagna, and Old Rome.

For Paper (4). *Becker*, Charikles and Gallus. *Guhl* and *Koner*, Das Leben der Gr. und Röm., transl. by Hueffer. *Rich*, Dict. of Rom. and Gr. Ant. *Daremberg* and *Saglio*, Dict. des Ant. *Birch*, Ancient Pottery. Prof. *Middleton*, Engraved Gems of Classical Times. *King*, Antique Gems and Rings. *British Museum*, Select Greek Coins, and series of Guides. *Lenormant*, La Monnaie dans l'antiquité. *Mommsen Th.*, Histoire de la monnaie Romaine (ed. Duc de Blacas). *Kirchhoff*, Geschichte des griechischen Alphabets. *Franz*, Elementa epi-

graphices Græcæ. *Wilmanns*, *Exempla inscriptionum Latinarum*.

The following works of ancient authors are recommended as essential for reference or special study :

Pausanias. *Strabo*. *Pliny*, *Nat. Hist.* xxxiv. and xxxv. (Urlichs' *Chrestomathia*, pp. 271 ff.). *Philostratus*, *Imagines*; and *Callistratus*, *Statuæ*. *Vitruvius* (especially the Prefaces).

A complete collection of passages of ancient authors bearing on the lives and works of artists is given in *Overbeck*, *Antike Schriftquellen*.

The subjects of this section should also be studied in portions of Greek and Roman general literature, such as the following :

Anthologia Græca (with *Benndorf*, *De epigrammatis quæ ad artes spectant*). *Lucian*, *Herodotus*, *Imagines*, *Zeuxis*. *Varro*, *Ling. Lat.* v. §§ 41—55. *Propertius*, the last two books. *Statius*, *Silvæ*. *Pliny*, *Ep.* ii. 17 and v. 6. *Tertullian* *de Spectaculis*. *Calpurnius*, *Ecl.* vii.

SECTION E. *Language.*

This section is to include (exclusive of the English Essay hereafter to be mentioned) four papers of three hours each.

(1) One paper is to contain (a) Questions on Greek etymology, and the history of the Greek dialects, with illustration from inscriptions or other sources: (β) Questions on Greek syntax, together with passages from Greek authors for translation,

comment, or emendation: (γ) Questions on the etymology and usages of the Greek and Latin languages as compared with one another.

(2) One paper is to contain (α) Questions on Latin etymology and the history of the cognate Italian dialects with illustration from inscriptions or other sources: (β) Questions on Latin syntax together with passages from Latin authors for translation, comment, or emendation: (γ) Questions on the etymology and usages of the Greek and Latin languages as compared with one another.

(3) One paper is to contain (α) Simple questions on Sanskrit grammar, with special reference to those forms which illustrate the history of the Greek and Latin languages: (β) Easy passages from selected Sanskrit authors for translation and comment.

A candidate shall not be debarred from obtaining a place in the first class for the sole reason that he has omitted to take this paper.

A knowledge of the characters of the Sanskrit alphabet shall in no case be required.

(4) One paper is to contain (α) General questions on the comparative Grammar of the Indo-European languages, with special reference to the Greek and Latin languages: (β) Questions on the history of Alphabets: (γ) Questions on some selected portion or portions of the comparative Grammar of the Indo-European languages, which the Board shall from time to time define either by suggesting the books to be read or otherwise.

No Essay shall be set in this section: but any candidate shall be at liberty to send up (a fortnight before the Examination begins) an English Essay on some subject comprised in this section, upon which Essay he shall be examined *viva voce*, at such time and in such manner as the Examiners shall decide.

Lists of books upon the various parts of this section will be found in Mayor's *Guide to the Choice of Classical Books*. The progress of philological study has been so rapid of late years that new books containing elucidations and classification may constantly be looked for.

For papers 1, 2, 4, the following books are recommended to be studied (in addition to the grammars in ordinary use):

Curtius, *Griechische Etymologie* (tr. Wilkins and England), especially Book III.

Ahrens, *de Graecae Linguae Dialectis*. The papers on this subject in Curtius *Studien zur griechischen und lateinischen Grammatik* should also be referred to.

Cauer, *Delectus Inscriptionum Graecarum*.

Corsen, *Aussprache Vokalismus und Betonung der lateinischen Sprache*.

Peile, *Introduction to Greek and Latin Etymology*.

Wordsworth, *Fragments and Specimens of Early Latin*.

Corpus Inscriptionum Latinarum, Vol. I. pp. 1—127. (Students who cannot easily obtain access

to this book may find nearly all the inscriptions in Willmanns' *Exempla Inscriptionum Latinarum*.)

Schleicher's *Compendium der vergleichenden Grammatik* (tr. Bendall, so far as Greek, Latin and Sanskrit are concerned).

Curtius, *das Verbum der griechischen Sprache* (tr. Wilkins and England).

Kirchhoff, *Geschichte des griechischen Alphabets*, or Fabretti, *Palaeographische Studien* (tr. from the Italian). Corssen, *Aussprache, &c.*, Vol. i. pp. 1—29 (on the Latin Alphabet).

Cobet, *Variae Lectiones, Novae Lectiones*.

Madvig, *Adversaria Critica, Liber I*.

Recourse must be had to a Lecturer or Tutor with regard to the selected subjects and books for advice in Section E.

Selected Subjects and Books.

The Board of Classical Studies publish lists of selected subjects and books for Sections B, C, D, E, of the Second Part of the Classical Tripos Examination in their Report for each year in the May Term. Notice of selected subjects must have been given two years before the Examination in which they are required.

Chancellor's Medals.

Two medals are given by the Chancellor of the University of Cambridge every year for the encouragement of Classical learning.

It is now possible for any student who is qualified to be a candidate in the Classical Tripos to be also a candidate for the Chancellor's Medals in the same year. In addition to the names of the Medallists, the Examiners are required to publish an alphabetical list of those candidates who have highly distinguished themselves in the Examination. An opportunity is thus offered to any student who from temporary ill health or other impediment during the Tripos Examination has been unable to do justice to his attainments, of proving his proficiency in classical learning.

The examination differs in some respects from that of the Classical Tripos, as will be seen from the following notice issued by the Examiners on November 27, 1871: "The Examiners for the Chancellor's Classical Medals have agreed that the Examination under the new regulations (which first come into force in 1872) shall comprise the following subjects:

Translations from Greek and Latin Prose and Verse into English.

Translations into Greek and Latin Prose and Verse.

Latin Essay.

English Essay on a Classical Subject.

A paper will also be given in Classical Philology and Criticism."

ON PREPARATION FOR THE THEOLOGICAL EXAMINATIONS.

I. The Theological Examinations.

1. The Special Theological Examination.
2. The Theological Tripos.
3. Preliminary Examination of Candidates for Holy Orders [Not a University Examination].

II. University Scholarships and Prizes.

1. Crosse Scholarship.
2. Tyrwhitt Scholarships and Mason Prize.
3. Carus Greek Testament Prizes.
4. The Evans Prize.
5. The Scholefield Prize.
6. Hebrew Prize.
7. The George Williams Prize.
8. Dr Jeremie's LXX. Prizes.

III. Hints on Reading.

1. Holy Scripture.
 - i. Old Testament and Apocrypha.
 - (a) Hebrew Text.
 - (b) LXX.
 - (c) The Vulgate.General questions.
 - ii. New Testament.
 - (a) Greek Text.
 - (b) Versions.General questions.

2. Ecclesiastical History.
 - i. The narrative.
Special inquiries.
 - ii. Patristic Literature.
Suggestions of course of reading under groups of writers.
3. Dogmatics.
 - i. The Creeds.
 - ii. Scheme of Doctrine.
 - iii. The xxxix. Articles
and Confessions.
4. Liturgies.
 - i. Liturgies proper.
 - ii. Other Service-Books.
 - iii. Church Hymns.
General hints.

I. THE THEOLOGICAL EXAMINATIONS.

THERE are at present two "Theological Examinations" established by the University: *The Special Theological Examination* (1), and *The Theological Tripos* (2). To these must be added a third Examination, which has been organized by members of the Theological Faculty to meet the wants of Candidates for Holy Orders (3).

1. THE SPECIAL THEOLOGICAL EXAMINATION.

The Special Theological Examination is one of the Special Examinations for the B.A. degree. The Examination is conducted by printed papers; and, under the new scheme, will consist of two parts.

Part I. is open to students who have entered on their sixth term at least, and consists of three papers:

- (1) Outlines of Old Testament History.
- (2) One of the Gospels in Greek.

- (3) The History of the Jews from the close of the Old Testament History to the Fall of Jerusalem, with special attention to the condition of Palestine in the time of our Lord.

Part II. is open to students who have entered on their ninth term at least, and consists of six papers :

- (1) A selected portion of the Historical Books of the Old Testament, together with one from the Prophetical Books or Psalms in English.
- (2) One or more of the Epistles in Greek.
- (3) Outlines of English Church History to A.D. 1830.
- (4) A selected portion of the Historical Books of the Old Testament in Hebrew, with easy questions on Hebrew Grammar.
- (5) Outlines of Early Church History to the death of Leo the Great.
- (6) A selected subject or period of English Church History with a selected original authority in English.

Paper 3 in Part I., and papers 4, 5, 6, in Part II. will be voluntary, but the results will be taken into account in assigning places in the Class-list; and marks will be affixed to the names of those who pass satisfactorily in any of these papers.

The selected subjects for each Examination are announced by the Theological Board before the end of the Easter Term, for the year next but one following.

The names of those who pass the Examination are arranged in three classes: the names in the first class being arranged in order of merit, and those in the second and third alphabetically.

2. *THE THEOLOGICAL TRIPOS.*

In accordance with a Grace of the Senate, Dec. 8th, 1871, a Theological Tripos was established under regulations corresponding to those of the other Honour Examinations for the degree of B.A. The original scheme has since been modified more than once by Grace of the Senate. In its present form the Tripos consists of two parts, the first beginning on the Monday before the first Sunday in June, and lasting four days: this is immediately followed by the second, which extends over eight days.

The first part is open to candidates for the degree of B.A. under the same general conditions as the other Triposes. Students who have obtained Honours in any other Tripos may become candidates for Honours in the first part of the Theological Tripos, or in both parts, or in the second part only, with certain qualifying papers from the first part.

The conditions in the various cases will be found stated at full length in the Appendix, but it must be noted that the whole scheme of the Tripos is now being revised by the Theological Board, and very considerable changes are proposed.

The present scheme, however, must necessarily hold in force for some time longer.

The Examination (Part I.) is conducted by printed papers according to the following Schedule.

| DAYS. | HOURS. | SUBJECTS. |
|-----------|-------------------------|--|
| Monday | 9 to 12 1½ to 4½ | 1. Old Testament (General Paper). 2. The Book of Genesis or some other specified portion of the Historical Books of the Old Testament in Hebrew. |
| Tuesday | 9 to 12 1½ to 4½ | 3. Passages for Translation from the Historical Books of the Old Testament (Hebrew) generally; with questions on Hebrew Grammar and easy Hebrew Composition. 4. New Testament (General Paper). |
| Wednesday | 9 to 12 1½ to 4½ | 5. The Gospels, in Greek, with special reference to some selected Gospel. 6. The Acts of the Apostles, the Epistles, and the Apocalypse, in Greek, with special reference to some selected portion. |
| Thursday | 9 to 12 1½ to 4½ | 7. The History of the Church to the death of Leo the Great. In each year an original work bearing upon some portion of the history shall be selected for special study. 8. The history of Christian doctrine to the close of the Council of Chalcedon, with special reference to the ancient Creeds and other original authorities. |

For details as to the Second Part, reference may be made to the Appendix.

It is laid down that :

(1) The General Paper on the Old Testament shall contain questions (i) on the contents of the Old Testament Scriptures, and on the history of the Jews down to the Christian Era ; (ii) on the Authorship, Date, Substance and Form of selected portions of the Historical, Poetical and Prophetical Books. Questions shall also be set on the History of the Hebrew Text, and of the Greek and English Versions.

(2) The Paper on Genesis or other specified portion of the Historical Books shall contain passages for translation from the selected portion, with passages for retranslation and for pointing. The other Hebrew paper shall contain passages from the Historical Books generally, with grammatical questions, pointing, and easy Hebrew composition.

(3) The General Paper on the Greek Testament shall be divided into two nearly equal parts, (i) containing questions on the formation of the Canon and on Textual Criticism, (ii) questions on the grammar and language of the New Testament, and easy Greek composition.

(4) The two papers on (i) the Gospels and (ii) the rest of the New Testament shall contain passages for translation and retranslation and questions on the subject-matter of the books generally ; but questions on Authorship, Date and Textual Criticism shall be set only from the selected portions.

(5) The Board of Theological Studies shall determine from time to time the credit to be assigned to the several subjects enumerated in the Schedule.

(6) No credit shall be given to a student in any paper in either part, unless it appear to the Examiners that he has shewn a competent knowledge in that paper.

(7) In the class list of the first part the examiners can add marks of distinction in Old or New Testament, or both, to the names of students, who, besides Part I., have taken a paper in the corresponding section or sections of Part II.

Public notice of all the variable subjects selected for the Examination in any year is given by the Board of Theological Studies before the end of the Easter Term in the year next but one preceding the Examination.

The names of those students who pass the Examination with credit are placed in three classes, the names in each class being arranged in alphabetical order; and the Class List is published by the Examiners in the Senate-House on the Saturday next before the third Sunday in June.

3. *PRELIMINARY EXAMINATION OF CANDIDATES FOR HOLY ORDERS.*

This Examination was established in 1874 mainly with a view to aid in promoting a more systematic and better distributed course of pre-

paration for Holy Orders. It is not provided by the University, but was instituted by members of the Theological Faculty, in cooperation with representatives of a considerable number of Bishops. With these, the Theological Faculty of the University of Oxford was subsequently associated.

The General Council of Management consists of the Divinity Professors of Cambridge and Oxford; and one Examining Chaplain nominated by each of the Bishops who are willing to take part in the scheme.

Examinations are held twice every year, about Easter and in October, in such places as the Council determine from time to time. Due notice is given of the times and places of Examination.

The Examinations are conducted by printed papers in the following subjects :

- (1) A general paper on the contents of the Bible.
- (2) Selected portions of the Old Testament, together with questions on 'Introduction' and criticism in reference to the Old Testament generally.
- (3) Selected portions of the New Testament in the original Greek, together with questions on 'Introduction' and criticism in reference to the New Testament generally.
- (4) The Creeds, and the xxxix. Articles: history and contents. Questions on Apologetics.

- (5) The Prayer-book : history and contents.
- (6) Selected portions of Ecclesiastical History.
- (7) A selected work or works of a Latin Ecclesiastical writer, together with a passage for translation into English from some Latin author not previously specified.

(8) A voluntary paper on Elementary Hebrew.

Due notice is given by the Council of the subjects selected from time to time, which are the same for the two Examinations of each year.

The Examinations are open to Graduates of the *English* Universities ; to members of Theological Colleges, in connexion with the Church of England, who have at least entered on the last term of the complete course and are recommended by the Principal ; and also to any other person, whether a member of a Theological College or not, who may be nominated by a Bishop with a view to Ordination in his own diocese.

A fee of twenty-five shillings is charged to every Candidate who enters the Examination.

Every Candidate, before he is admitted to the Examination, must declare himself a member of the Church of England, and produce a satisfactory certificate of moral character.

A list of those Candidates who have satisfied the Examiners, arranged alphabetically in three classes, is published three weeks after the close of the Examination. Copies of this list are sent to all the Bishops who take part in the scheme, and

certificates are granted to the successful Candidates.

Examinations are ordinarily held at the following centres: *Birkenhead, Birmingham, Cambridge, Chichester, Edinburgh, Lincoln, London (Highbury), London (King's Coll.), St Bees, Truro, Warminster.*

The secretary, to whom all communications should be addressed, is the Rev. Dr. King, Gayton Rectory, Blisworth, R.S.O.

II. UNIVERSITY SCHOLARSHIPS AND PRIZES.

1. THE CROSSE SCHOLARSHIP.

The Crosse Scholarship is open to all Graduates under the standing of M.A., and is tenable for three years.

The Examination, which is held annually in the second half of the Michaelmas Term, 'turns upon a knowledge of the Holy Scriptures in their original tongues, Hebrew and Greek, of Ecclesiastical History, of the earlier and later Heresies, and such other subjects of useful enquiry as may be thought most likely to assist in the formation of valuable characters, fitted to sustain and adorn the cause of true Religion.'

The Examiners are authorised to publish the names arranged in order of merit of such Candidates as shall pass the Examination with credit.

2. *THE TYRWHITT SCHOLARSHIPS AND MASON PRIZE.*

The Tyrwhitt Scholarships are open to Bachelors of Arts under the standing of M.A. or Students in Law or Medicine of corresponding standing.

The Examination is held annually in May, and turns upon a knowledge of Biblical Hebrew and other subjects which directly illustrate it.

The Examiners are required to publish the names arranged in order of merit of such Candidates as pass the Examination with credit.

The Mason Prize is awarded to that Candidate for the Tyrwhitt Scholarships who is judged to have shewn the best knowledge of Biblical Hebrew and of Hebrew composition.

3. *THE CARUS GREEK TESTAMENT PRIZES.*

There are two Carus Prizes given annually, one to Undergraduates, and the other to Bachelors of Arts.

The Examination is held in the Michaelmas term, and embraces translation and questions upon the Criticism and Interpretation of the New Testament.

4. *THE EVANS PRIZE.*

The Evans Prize is given annually to that student among the Candidates for Honours in the second part of the Theological Tripos, who shall be judged by the Examiners to stand first in the papers on Ecclesiastical History and the Greek and Latin Fathers.

5. *THE SCHOLEFIELD PRIZE.*

The Scholefield Prize is given, under the same conditions as the Evans Prize, to that student who shall be judged by the Examiners to have shewn the best knowledge of the Greek Testament and of the Septuagint Version of the Old Testament.

6. *HEBREW PRIZE.*

The Hebrew Prize is adjudged, under the same conditions as the Evans Prize, to the student who shall be judged by the Examiners to have shewn the best knowledge of Hebrew.

7. *THE GEORGE WILLIAMS PRIZE.*

The George Williams Prize is given under the same conditions as the Evans Prize, to the student, who shall be judged by the Examiners to stand first in the papers on Doctrine and the Ancient Liturgies.

8. *DR JEREMIE'S SEPTUAGINT PRIZES.*

The two Jeremie Prizes are open to all members of the University, who, having commenced residence, are not of more than three years' standing from their first degree.

The Examination, which is held in the second half of the Michaelmas Term, is directed mainly though not exclusively to selected books of the Old Testament in the Greek Version and other Hellenistic writings.

Notice of the books selected is given in the Michaelmas Term of the year preceding the Examination.

There are several prizes for Essays on Theological subjects offered under different conditions. Two are annual, the *Hulsean* open to any member of the University under the standing of M.A.; and the *Burney* open to Graduates who are not of more than three years' standing from admission to their first degree when the Essays are sent in. The *Kaye* (given every fourth year) and the *Maitland* (given once in every three years) are open to Graduates of the University of not more than ten years' standing from their first degree; and the *Norrisian* (given once in five years) to Graduates of not more than thirteen years' standing from admission to their first degree when the Essays are sent in.

III. HINTS ON READING.

It will be seen that the general Theological Examinations (§ I.), as well as the Examinations for Scholarships and Prizes (§ II.), are formed upon the same model, though they differ considerably in their range and standard. The same general method of study will therefore be suited for all; and the following hints, which are offered primarily for the guidance of Candidates for the Theological Tripos, will be applicable, with the necessary

modifications, to Candidates for any of the other Examinations.

The subjects of Examination may be ranged under the following heads.

1. Holy Scripture.
2. Ecclesiastical History.
3. Dogmatics.
4. Liturgics.

Some remarks will be made on each of these groups of subjects in succession. But it may be well at the outset to call attention to the fact that the course of reading for the Theological Tripos is designed to occupy only two out of the three years of an Undergraduate's residence. The first year of work in the University ought in all cases to be given to the preparatory discipline of Scholarship and Elementary Mathematics. No premature acquisition of technical knowledge can compensate for the want of the exact habits of expression, method and thought which this introductory training is fitted to create or to confirm.

It may be added that the Theological Subjects included in the course for the Ordinary Degree offer a solid foundation for study, if they are treated intelligently and in due connexion. Thus a student during the preparation of the Gospel and Paley's Evidences for the Previous Examination, may well gain a good general knowledge of the contents and characteristics of the four Gospels and of early Church History. Careful work on the Acts for

the General Examination will furnish an outline of the first constitution of the Christian Church and the historic framework for most of the Epistles. The Special Examination, with subjects from the Old and New Testaments and English Church History, carries forward the line of reading already begun, and leaves opportunity for the study of Doctrine.

8. HOLY SCRIPTURE.

The first requisite for an intelligent study of Holy Scripture is a fair acquaintance with the original languages. The student must be in a position not only to appropriate but also to weigh the opinions of the commentator whom he consults; and in very many cases the *Concordance* is the best commentary.

Most men when they enter the University have already such an acquaintance with Greek as will enable them to enter profitably on the study of the New Testament and LXX. [Those who have no knowledge of Hebrew will do well to acquire a sound grammatical knowledge of the elements of the language as soon as possible.] For this purpose Mason's *Exercise Book* is a serviceable manual. And when the student is sufficiently advanced he must have a good grammar (as Gesenius' translated by Davies) at hand for reference.

It is assumed then that the Candidate for Honours in the Theological Tripos, when he begins his special course of reading, will be able to use

(with the help of lexicon and grammar) his Hebrew and Greek Testaments. This being so, he will naturally take some Scriptural subject as part of his work from the first; for the study of the Bible will be the beginning and end of his studies, the most fruitful of all and the most inspiring.

In preparing any book of Holy Scripture the student's first object must be to master the text itself, to become familiar with the various kinds of evidence by which it is attested; to note the most remarkable variations in reading which the book offers; to trace its peculiarities in language or thought; to work out its plan; and to determine the relation in which it stands to other books similar in scope and character. For this purpose he will need no other help than his lexicon, his concordance, his grammar, and his critical edition of the original. The result of his labour will no doubt be very imperfect, but it will be substantial. The facts which he has gained will be luminous illustrations of principles and not mere burdens on the memory.

After this preliminary work the student will be prepared to examine what has been written on the subjects treated in "Introductions" to the book, as its authorship, date, sources, place of composition, integrity, history, use and the like. And in following out these inquiries he will learn both the value and the defects of his own previous investigations. The details with which he will

deal will have a reality which they could not have had, if he had entered upon questions of literary and historical criticism without direct and independent acquaintance with the book itself.

One other general principle must be observed. When the contents and the history of the particular book have been mastered, the book as a whole must be placed in a vital connexion with the external and the spiritual circumstances of the age to which it belongs. In no other way is it possible to enter into a full understanding of its interpretation, to gain a true conception of the method of the Divine Revelation, or to apprehend the present teaching of the Bible for ourselves.

It will be well for the student commonly to read two books at the same time in different ways: the one rapidly, with regard chiefly to the main thoughts and the broad lines of argument; and the other very slowly, with as complete an examination as possible of language, construction and shades of expression.

Retranslation is one of the most efficient and instructive tests of a knowledge of the text. A single verse retranslated and compared with the original every day will in a short time bring a power of insight into the meaning of the Books of the Bible which cannot perhaps be gained in any other way.

These general rules apply to the special study of all the books of the Old Testament (and Apocrypha)

and New Testament alike. They admit however of being illustrated somewhat more in detail in connexion with each group of books.

i. OLD TESTAMENT.

(a) *Hebrew Text.*

[The student will provide himself with a copy of the Hebrew text of the Old Testament.

Convenient editions of various sizes are published by the British and Foreign Bible Society.]

Very little has been yet done systematically for the textual criticism of the Old Testament. The collections of various readings made by Kennicott and De Rossi are an important instalment of materials towards the work; and the student will read with advantage the *Dissertatio generalis* of Kennicott, and De Rossi's *Prolegomena*. Dr S. Davidson has published a selection of various readings in convenient shape. It will soon however become evident to the student that the problem of the true relation of the Masoretic text, represented in all known Hebrew MSS. with the exception of isolated readings, to the texts represented by the Samaritan Pentateuch and by the older versions (Greek and Syriac) has not yet been solved.

The best lexicon to the Old Testament is Gesenius' *Thesaurus* completed by Roediger. Fuerst's *Hebrew and Chaldee Lexicon*, translated by Davidson, [though valuable, is marred by much that is arbitrary and fanciful.] Fuerst's *Concordance* will be of great value to advanced students. Of smaller

lexicons, Leopold's, Buxtorf's, Davies' and Gesenius' Manual Lexicon are serviceable.

It is impossible to specify particular Commentaries in detail. Examples of each type may be noticed. Among patristic Commentaries Jerome on the Prophets and Augustine on the Psalms will be consulted with advantage. The English translations of Kimchi on Zechariah (by McCaul) and of Ibn Ezra on Isaiah (by Friedländer), and the Latin translations of Kimchi on Isaiah and on the Psalms, and of Rashi (Jarchi) on the whole of the Old Testament, will serve as good specimens of Rabbinic Commentaries. Rosenmüller's *Scholia* contain a great mass of materials from modern commentators up to the date of their publication (c. 1800—1830). Maurer's *Commentary* and the *Kurzgefasstes Exegetisches Handbuch zum Alten Testament* are valuable for the grammatical interpretation of the text. All these Commentaries however will need to be used with caution and reserve for various reasons; and the young student will best commence his work under the guidance of such a commentary as that of Delitzsch on Isaiah.

(b) *The Septuagint.*

[So far as it has yet appeared, the best manual edition is the Cambridge University edition by Dr Swete, but the concluding volume has not yet been published. Of complete editions, that of Tischendorf, with the Appendix by Nestle, is the best.] The Oxford edition, which is better printed,

has a less complete *apparatus*. The great edition of Holmes and Parsons offers a mine of critical materials; but a critical edition of the LXX. is yet to be desired. De Lagarde has made a beginning of such a work (Genesis 1868); and Fritzsche's labours on the Apocryphal books, and on Esther, Ruth and Judges, are very valuable. The great work of Hody, *De textibus*, still remains the standard authority for the history of the translation.

There is as yet no satisfactory lexicon to the LXX. The lexicon of Schleusner contains a considerable amount of useful matter, but it is incomplete and ill-arranged. Wahl's *Clavis* to the Apocryphal Books is far more satisfactory. And the *Concordance* of Trommius, though not perfect, is indispensable to the student. Grinfield's *N. T. Editio Hellenistica* represents vividly the linguistic connection of the LXX. and the Apostolic writings.

The LXX. offers, as will be seen, an almost unworked field for critical labour; and the collation of a few chapters of the translation with the Hebrew text in different books (e.g. Pentateuch, I. II. Samuel, Psalms, Isaiah), will suggest to the student problems of the deepest interest and importance. Valuable hints towards working these out will be found in Thenius' Commentaries in the *Kurzgefasstes Exeg. Handbuch*. Frankel's *Vorstudien* is an unsatisfactory and yet useful book.

The study of the LXX. must be combined with that of the fragments (1) of the old Latin version edited by Sabatier and since supplemented by other

scholars; and (2) of the other Greek versions edited afresh [after Montfaucon] with great completeness by Field (*Origenis Hexapla quæ supersunt*).

For the Apocryphal books the *Kurzgefasstes Exeg. Handbuch* of Grimm and Fritzsche is a complete and, on the whole, a satisfactory commentary. [To this may be added the volumes on the Apocrypha in the *Speaker's Commentary*.]

(c) *The Vulgate.*

The edition of the Old Testament (1873) by Tischendorf from the Codex Amiatinus is probably the best. His edition of the N. T. from the same MS. completes the Bible. The incomplete *Variae Lectiones* of Vercellone are, as far as they go, invaluable; and many important MS. variations are given in the editions of Jerome (*Divina Bibliotheca*). The 'authorised' (Clementine) edition of the Vulgate, which is commonly printed, abounds in unquestionable interpolations from the Old Latin, that is ultimately from the LXX.

The Concordance of Dutripon is satisfactory for the Clementine text; and the various works of H. Roensch will be found very useful for the elucidation of peculiar idioms and words (*Itala u. Vulgata. Das N. T. Tertullians.*). To these Kaulen's *Handbuch d. Vulgata* [and Ziegler's *Die Lateinischen Bibelübersetzungen vor Hieronymus u. die Itala des Augustinus*] may be added.

In preparing any book thoroughly the student

will do well to read (as far as he is able) these three chief texts, the Hebrew, the Greek, and the Latin. If he wishes to go further, Walton's *Polyglott* will furnish him with Latin translations of the Samaritan translation of the Pentateuch, the Syriac, the Arabic, and the Targums. The Targums on the Pentateuch have also been translated into English by Dr Etheridge.

The several great divisions of the Old Testament offer many characteristic questions of general interest to which special attention must be paid.

A. *Pentateuch and Joshua.*

(a) The characteristics of Palestine: geographical, historical, etc.: earlier and later inhabitants (*e.g.* Anakim, Canaanites, Philistines, Midianites, etc.).

(b) Ethnological affinities of the Jews. Their language and its changes.

(c) The call of Abraham. The Patriarchal Dispensation.

(d) The permanent effects of the sojourn in Egypt; and the relation of the ordinances of the Law to the Egyptian ritual.

(e) The fitness of the Law as a training for the individual and the race; and as a preparation for the Gospel.

(f) The wanderings in the desert. The division of Canaan and its influence on the character and history of the tribes.

B. *The later Historical Books and the Prophets.*

(a) The relation between the political and religious history of the people (Theocracy, Monarchy, Hierarchy).

(b) The immediate circumstances under which special prophecies were given; and their typical character. Application in the New Testament.

(c) The political and religious characteristics of the kingdoms of Judah and Israel.

(d) The points of contact of the Jewish and Gentile nations, and the permanent effects of foreign intercourse upon Judaism (*e.g.* the Captivity, the Dispersion).

(e) The history of the Jewish nation between the close of the Canon and the Advent (the Maccabees, the Alexandrine Jews, the Herodian dynasty).

While tracing the development of Judaism the student ought to consider the main characteristics of the præ-Christian religions of Heathendom. For this purpose the excellent little manuals published by the Society for promoting Christian Knowledge on Hinduism, Buddhism and Confucianism are sufficient guides.

In reading the *Psalms* every student should compare the Prayer-Book and Bible Psalters; and, when the differences between them are important, the source of the discrepancy and the true rendering must be ascertained. Jerome's Version from the Hebrew ought to be compared with the Version

printed in the Latin Vulgate. A Hexaplar Psalter containing the Hebrew, Greek, two Latin (Vulgate and Jerome's) and two English (Prayer-Book and 'Authorised') texts has been published by Messrs. Bagster, which will be found very useful. As far as possible the historic circumstances of each Psalm should be determined, and the use (if any) made of it in the New Testament. In this subject Perowne's *Commentary* will be of great value.

ii. NEW TESTAMENT.

(a) *Greek Text.*

Every student will do well to furnish himself with a manual edition of the Greek text without notes, as, for example, Scrivener's, which marks conspicuously the variations of the chief critical editions from the received text. The simple reprints of Stephens or Elzevir, which are most used, should be avoided carefully, for it is difficult to remove afterwards the false impressions in detail which they give. In addition to the bare text the more advanced student will require an edition with an *apparatus criticus*, as Tischendorf's eighth edition, which is the most complete, or the abridgement of it. [To this should be added the text of Westcott and Hort, and, in the case of more advanced students, the accompanying volume of Introduction and Appendix.]

It is further essential that every one should gain a general idea of the history of the text, of the

principal authorities by which it is determined, and of the general principles on which the true reading is fixed. Scrivener's *Plain Introduction* gives a very complete account of the materials for New Testament criticism. Some rules for their use can be found in the article 'New Testament' in the *Dictionary of the Bible* or in Hammond's *Textual Criticism*. But no second-hand information can supply the place of independent work. The force of rules will then first be perceived when the student has followed the readings of *groups* of authorities through a few chapters (*e.g.* of BDLΔ and the Latin and Oriental versions through the earlier chapters of St Mark; and of ⲚD old Lat. and old Syr. through a section of the Gospels).

[The best Lexicon is that of Grimm, as translated and enlarged by Dr Thayer. Urwick's revised translation of Cremer's Lexicon is also very good. In this connection, Archbishop Trench's work on *New Testament Synonyms* cannot be too highly praised.] Bruder's *Concordance* is indispensable for the thorough study of the text. And if to this Winer's *Grammar* translated and edited by Dr Moulton be added, the student will be adequately furnished for independent and invigorating work.

Commentaries should not be consulted till the text has been carefully examined without them. When this has been done they serve to clear up difficulties which have been really felt and to point out others which have been overlooked. Bengel stands supreme for spiritual insight and for sugges-

tive and stimulative power. The respective merits of recent English, German and Swiss commentaries are well known, and when the student has advanced so far as to profit by them he may safely make his own choice. Wetstein, Lightfoot's *Horæ Hebraicæ*, and Schoettgen, cannot be dispensed with for illustrations from Classical and Jewish sources; and Dr Taylor's edition of the *Aboth* (*Sayings of the Jewish Fathers*) is of the highest interest for the history of Jewish thought.

(b) *Versions.*

The Vulgate and Old Latin versions (see p. 21) should always be read in conjunction with the Greek text. The student who wishes to understand yet more fully the form in which the Apostolic writings were current in the first ages will find Cureton's translation of the fragments of the old Syriac and Etheridge's translation of the Peshito Syriac full of interest.

In studying a Gospel or an Epistle each reader should tabulate for himself peculiarities of incident or teaching, correspondences with other books and differences from them, the use of the Old Testament, the relation in which the special books stand to the whole cycle of the Apostolic records. For example, in reading the Gospel of St John, it is of the utmost importance to realise the difference of this Gospel from the Synoptic Gospels in plan, in contents, in style, and its agreement with them in personal portraiture: to follow out its connexion

with the Epistles of St John and the Apocalypse : to ascertain its doctrinal connexion with the Pauline Epistles, *e.g.* through the Epistle to the Ephesians and with the Epistle to the Hebrews.

So again in reading any one of the first three (Synoptic) Gospels care must be taken to observe what sections in each are common to the three, what differences of order and detail are found in the common parts, how far peculiar incidents or traits can be fairly referred to the design of the narrative in which they are found, what light is thrown upon the source (oral or written) of the common elements by the distribution of the coincidences. Such inquiries may seem to be mechanical, but they lead the student little by little to find the three-fold life of the first Apostolic Gospel, and to vindicate at once the substantial distinctness of each record and the full harmony of all. In working out these questions Gardiner's *Harmony of the Four Gospels*, Tischendorf's *Synopsis* and Mr Rushbrooke's elaborate *Synopticon* will be of great service. Anger's *Synopsis* contains much illustrative matter from early writers. Greswell's *Harmony* is printed on a most convenient plan, but the text is very faulty, and it is obvious that parallel narratives are peculiarly exposed to corruption, so that in comparing them a sound critical text is indispensable.

The plan, the correspondences and the sources of the Book of the Acts will furnish investigations of scarcely less interest. And, to touch upon

another branch of criticism, the glosses found in a considerable group of authorities will in this case offer a unique problem for study.

The questions raised by the Epistles are still more varied. For the most part the real understanding of the Epistles depends upon a clear conception of the circumstances of the Churches to which they were addressed and of the special relations in which the writer stood to them. The character of the parties at Corinth, and of the false teachers at Colossæ (for instance), must be carefully examined in reading the Epistles to the Corinthians and Colossians. And the result of the examination will be a more vivid apprehension of the dangers and powers of the first age than can be ever gained if the most exact method of the historical interpretation of the documents be once abandoned. At the same time a sense of the reality of the facts of Apostolic Christendom will be secured, such as Paley successfully develops in his *Horæ Paulinæ*. For a general view of Apostolic doctrine the work of Neander is most suggestive and instructive. Lightfoot's *Essays* in his editions of St Paul's Epistles to the Galatians and the Philippians and Westcott's *Introduction to the Study of the Gospels* will indicate the lines in which these inquiries may be directed. [Salmon's *Introduction to the New Testament* is another book of very high value indeed.]

The examination of separate books will be completed by an examination of the history of the

collection of the Sacred Books (*History of the Canon*), and of the various confessional decisions on the contents and authority of Holy Scripture (e.g. *Tridentine Decree; Westminster Confession*, Chap. 1).

For further bibliographical and other details the student may consult the following articles in *Smith's Dictionary of the Bible: Apocrypha, Canon, Cyrus, Dispersion, Maccabees, New Testament, Old Testament, Samaritan Pentateuch, Septuagint, Targum, Versions, Vulgate*.

2. ECCLESIASTICAL HISTORY.

i. THE NARRATIVE.

Any one of the ordinary text-books (Hase, Kurtz, Robertson, Schaff) may be taken as the foundation of more detailed study. Gieseler gives at length in his notes a valuable collection of quotations from original authorities. Neander's great work is quickened throughout by spiritual genius. The *Mémoires* of Tillemont contain an arrangement of materials practically exhaustive up to the time of their composition.

No secondary history, however, can make the study of the authorities themselves unnecessary. The Greek Ecclesiastical Historians and the Historical Tracts of Athanasius are accessible in translations. But even if recourse be had to these for the main narratives, some documents at least should be read in the original: e.g. *The Martyrdom of*

Polycarp, The Letter of the Churches of Vienne and Lyons, The Acts of Perpetua and Felicitas, The several Decrees of Toleration, The Canons of the General Councils.

When once the student has mastered the chief outlines of the history of the period with which he has to deal, he will do well to give special attention to some one or other of the great questions which it includes. In this way his work will gain in freshness and life; he will find details gathered into a true unity; and he may reasonably hope to find some vein of inquiry which he can pursue with the intention of exploring it more fully by late and maturer study.

Thus in the first six centuries among other great topics the following may be noticed:

1. The varying relations of Christianity to the Empire up to the founding of Constantinople (the grounds and occasions of the Persecutions).
2. The influence of the foundation of the Eastern Empire upon the Church in (i) the East: (ii) the West.
3. The decay and fall of Paganism in (i) the East: (ii) the West.
4. The preparation for the rise of Mohammedanism.
5. The growth of Ecclesiastical organization. The Papacy.
6. The rise and various types of Monachism.

7. The gradual extension of Christianity throughout and beyond the Empire.

8. The influence of Christianity upon legislation.

9. The relation of Christianity to (i) Literature, (ii) Art, (iii) Contemporaneous thought.

The selected periods or biographies will in all cases be prepared with constant reference to the original authorities to which the student will be guided by the University Lecturers.

ii. PATRISTIC LITERATURE.

The particular patristic writings which are selected from time to time will serve in some degree to direct the student's choice of subject; but as far as there may be opportunity, he should endeavour to gain a direct acquaintance with the different forms of thought represented by the great writers of the period upon which he is engaged.

The following selection includes fairly typical specimens of Christian writings of the first six centuries, from which a choice may be made in due proportion as occasion serves, but no one division should be wholly neglected. Writings marked by [] are perhaps of less importance.

1. Clement of Rome.

The Ignatian Epistles.

[Barnabas. Hermas. Polycarp.]

The Clementine Homilies. [Recognitions.]

2. Justin Martyr, *Dialogue*. [Athenagoras.] *Epistle to Diognetus*.
3. Tertullian, *Apology*. *De resurrectione Carnis: De corona: [adv. Praxeam: one of the books against Marcion (e.g. v.)]*.
Irenæus: one (or more) of the last three books.
4. Clement of Alexandria: *Strom.* vii.
Origen, *Philocalia* (selections by Gregory and Basil), or part of the books *against Celsus*.
[Hippolytus, *de Antichristo*.]
Cyprian, *De unitate Ecclesiæ*: selected *Letters*.
The Fragments of Dionysius of Alexandria.
5. The Fragments of Arius and Alexander of Alexandria (in Athanasius, Socrates, Theodoret), Athanasius, *De Incarnatione: de Decretis Syn. Nic. [De Synodis.]*
Eusebius: the fragments in his *History* collected by Routh. [*c. Marcellum*.]
Cyril of Jerusalem, *Catechesis* iii. iv. [or more].
[Hilary, *De Trinitate*.]
6. Epiphanius, *Ancoratus*.
[Basil, *Hom. in Hexaemeron*.]
Gregory of Nyssa, *Oratio Catechetica*.
Gregory of Nazianzus, *De vita sua*. [*Oratio in Synod. Constant.*]
7. Ambrose, *De Spiritu Sancto*.
Jerome [*adv. Vigilantium*], selected *Letters*.
Augustine, *Enchiridion: De doctrina Christiana: de Fide et Symbolo*. [*De spiritu et litera: Part of de Civitate Dei. e.g. iv. v. xix.*]
8. Chrysostom, *De Sacerdotio*.
Cyril of Alexandria, *The three Œcumenical Letters*. [*In Joh. lib. i.*]
[Theodoret, *Philotheus*.]
Leo, *Ep. ad Flavianum*.
The *Definition of Faith* at Chalcedon.
Gregory I. *Regulæ pastoralis liber*.

In the study of the Fathers, Kaye on Tertullian, Clement of Alexandria, and (partially) Athanasius; Beaven on Irenæus; Stephens on Chrysostom, will be found useful. Maréchal's *Concordantia Patrum*, Lumper's *Historia Theologico-critica*, Lardner's *Credibility* and *History of Heresies*, and Cave's *Historia Literaria* are most valuable books of reference. Sophocles' *Lexicon* of Byzantine Greek, Suicer's *Thesaurus* and Roensch's *Itala u. Vulgata* will often be useful for the language.

3. DOGMATICS.

The study of Ecclesiastical History and of the patristic writings, according to the outline already drawn, will furnish the right introduction to the study of Doctrine. It is impossible to form a true conception of the definitions of Doctrine (Dogma) unless the definitions are referred to the historical circumstances under which they were formed. Thus the general object of the student will be to trace how ambiguities of meaning in technical words (*e.g.*, to take instances from one controversy, *ὑπόστασις, οὐσία, ὁμοούσιος*) have created divisions which experience has afterwards shewn to be unreal, and how the Catholic judgment finally reconciles and unites conflicting and partial views.

i. THE CREEDS.

The two ancient Creeds of the East and West, the Nicæno-Constantinopolitan and the Apostles'

Creed, will form the first centres of study. To these the Exposition of the Western Creed (*Quicumque vult*), known as the Athanasian Creed, will form an important appendage, since it contains in some detail the doctrine of the Person of the Lord, which is not developed in the two fundamental Creeds.

In studying the Creeds particular attention must be paid to the following points:

(a) The characteristic differences between the Eastern and Western types of Creed.

(b) The earliest form and the subsequent modifications of each Creed.

(c) The history of the technical words which occur in them (*e. g. Church, Only-begotten, Person, Substance*).

(d) The use of the Creed in Baptism.

Among other books Heurtley *De Fide et Symbolo* and *Harmonia Symbolica*, Hahn's *Bibliothek der Symbole*, Lumby's *History of the Creeds*, Caspari's Collections for the History of the Baptismal Creed (*Ungedruckte... Quellen zur Gesch. d. Taufsymbols*, 1866 ff.), Prof. Swainson's *Nicene and Apostles' Creeds*, Prof. Hort's *Two Dissertations*, Bull's *Defensio* and the solid work of Pearson, with Prof. Swainson's *Questions*, will be found of essential service in this branch of study. The notes of Pearson are almost a guide to the Fathers.

ii. SCHEME OF DOCTRINE.

In pursuing the subject of Dogmatics into further detail, the student will find it convenient to refer each special dogma to its relative place in some general scheme. Among other schemes the following has been shewn by experience to be useful.

Introduction. The Rule of Faith (PISTOLOGY).

1. Revelation and Reason.

2. The Sources of Doctrine.

i. The original memorials of Revelation.

(1) Holy Scripture.

Inspiration.

Canon (*Apocrypha* of O. T.; *Antilegomena* of N. T.).

Text.

Interpretation.

Popular use.

Adequacy.

(Examine different texts of *Art.* vi.).

(2) Tradition.

In relation to practice.

In relation to opinion. (*Art.* xxxiv.).

ii. The living interpretation of Revelation.

(1) The Christian Society (Development).

(2) The individual (Illumination: Quakers).

I. The Doctrine of God (THEOLOGY).

1. The general doctrine of God.

i. Supposed proofs of the existence of God.

(1) From without.

Cosmical.

Teleological.

(2) From within.

Ontological.

Moral.

ii. Essential characteristic: Unity, as
against

(1) Dualism (Gnosticism, Manichæism).

(2) Polytheism.

(3) Pantheism.

iii. The attributes and names of God.

2. The Doctrine of the Holy Trinity.

i. Tripersonality (*ουσία, ὑπόστασις, πρόσωπον*).

ii. The essential
economic Trinity.

iii. Contrasted heresies.

Sabellianism.

Arianism.

iv. The idea of Subordination.

3. The Doctrine of the Father.

i. The Fountain of Godhead.

ii. The Father in relation to

(1) The Son.

(2) Creation.

The world.

Man.

4. The Doctrine of the Son.

Before the Incarnation.

i. In relation to His Divine Being (λόγος ἐνδιάθετος).

ii. As revealed (λόγος προφορικός, σπερματικός).

(1) General revelation through Creation.
through Man specially.

(2) Special revelation to the Jews.

Stages of the Messianic promise.

5. The Doctrine of the Holy Spirit.

i. The Personality of the Holy Spirit.

ii. The Procession of the Holy Spirit:
history of the *filioque*.

iii. The action of the Holy Spirit before
the exaltation of Christ.

(Examine history of *Art. v.*)

II. The Doctrine of Man as the representative
of Creation (ANTHROPOLOGY).

1. Doctrine of Man in himself.

i. Origin.

Creationism.

Traducianism.

- ii. Constitution.
 - Body, Soul, Spirit.
 - (Natural immortality.)
- 2. Man and Creation.
 - i. The unseen world.
 - ii. The visible world.
 - iii. Man and humanity.
- 3. Man and God.
 - i. Man unfallen.
 - (1) The image
likeness of God.
 - (2) Original righteousness.
 - ii. Man fallen.
 - (1) Original sin. (Examine texts of *Art.*
ix.)
 - (2) Freedom. (*Art. x., xiii.*)
 - (3) Sin. (*Art. xv., xvi., Art. xvi. of*
1552.)
 - (4) Predestination. (*Art. xvii.*)
 - (5) Grace. (*Art. x. of 1552.*)

(The immaculate Conception of the Mother of the Lord.)

III. The Doctrine of Redemption, Reconciliation, Consummation (SOTERIOLOGY).

- 1. The Incarnation.
 - How far conditioned by the Fall.
 - i. The Divine Nature.

ii. The Human Nature.

- (1) Real (Docetism).
- (2) Perfect (Apollinarianism).
- (3) In what sense impersonal.

iii. The Hypostatic Union.

- (1) Without separation (Nestorianism, Adoptionism).
- (2) Without confusion (Eutychianism).
- (3) *Communio* (*communicatio*) *idionatum*.
- (4) The Passion, Descent to Hades, Resurrection, Ascension.
- (5) The worship of Christ.

(Examine the groups of words ἀληθῶς, τελῶς, ἀδιαιρέτως, ἀσυγχύτως—ἀσυγχύτως, ἀτρέπτως, ἀδιαιρέτως, ἀχωρίστως: the history and texts of *Art.* ii., iii., iv.)

2. The effect of the Incarnation.

- i. Atonement: in relation to the Fall.
- ii. Perfect fulfilment: in relation to the idea of Creation.
- iii. The Mission of the Paraclete.

3. The Incarnation in its application to man.

- i. Social conditions.
 - (1) The Christian Society. (*Art.* xix., xx., xxi.)
 - (2) The Ministry. (*Art.* xxiii., xxvi., xxxii., xxxvi.)

(3) The Sacraments.

Various Definitions. (*Art. xxv.*)

Baptism (Infant Baptism, Lay
Baptism, Rebaptization. *Art.*
xxvii.).

Holy Communion (in both kinds),
Infant Communion, as a Sacri-
fice, Eucharistic adoration. *Art.*
xxviii — xxxi. Hist. and
text.

(4) Ordinances of worship.

The Word of God.

The five so-called Sacraments.

Worship of the Virgin and of Saints.

Images; pictures; relics. (*Art. xxii.*)

ii. Personal conditions.

(1) Faith (*fides informis, formata*).

(2) Good Works. (*Art. xii.*)

iii. Realisation.

(1) Regeneration.

(2) Justification. (*Art. xi. texts.*)

(3) Sanctification. (*Art. xii.*)

(4) Works of supererogation (Counsels
of perfection). (*Art. xiv.*)

(5) Intermediate state.

Purgatory.

Prayers for the dead. (*Art. xxii.,*
xl. of 1552.)

4. Effects of the Incarnation beyond Man.

Epilogue (ESCHATOLOGY).

1. The Return. (*Art. xli. of 1552.*)
2. The Judgement. (*Art. xxxix. of 1552.*)
3. The Consummation. (*Art. xlii. of 1552.*)

In investigating the different members of such a scheme as has been given, it is of great importance to observe how in the providential guidance of the Church different parts of the whole sum of Truth have been developed and defined by different sections of Christendom and in different ages. Thus we find that controversies have centred in succession round the conceptions of the Catholicity of Christianity, the historic reality of the Person of Christ, the doctrines of the Incarnation, of Grace and Free-will, of the Atonement, of the Sacraments, of personal Faith, of Revelation and Reason. Generally too it will be obvious that the Greek, the Latin and the Teutonic Churches incline to certain characteristic forms and branches of dogma. The apprehension of this fact will serve as the basis for a sound study of Polemics. Doctrinal error springs from the excessive predominance of a special tendency; and it will not be difficult for a student who enters into the life of Christendom to trace back the origin of the errors of particular Churches (*e.g.* of the Roman Church), to the circumstances, national or political, under which they first took shape. In pursuing this branch of Dogmatics some text-book of the History of Doctrine, as

Hagenbach or Shedd, will be found desirable, in addition to the pertinent chapters in the Church Histories. Suicer's *Thesaurus*, though it is confined to the Greek Fathers and is often imperfect, is almost indispensable. Petavius *De Dogmatibus* is best reserved for latter study. Dorner's *Doctrine of the Person of Christ* is of great importance, and Martensen's *Dogmatics* will be found most suggestive and stimulative of thought, even where the particular opinions which are advocated may not be received.

Perhaps the most important counsel for the study of Dogmatics is that which insists on the careful definition of terms at the outset. Many words round which controversy turns are used in very different senses by opposite sides (*e.g.* *Sacraments, Justification, Faith*).

iii. THE ARTICLES AND CONFESSIONS.

The study of the xxxix. Articles should be combined with the study of the other confessions of the 16th and 17th centuries. There are convenient editions of the Roman Catholic Symbolic Books by Streitwolf and Klener, to which Denzinger's *Enchiridion* is an important appendix, of the Lutheran by Francke, and of the Reformed by Niemeyer. In this branch of Theology (Comparative Dogmatics), which has been grievously neglected in England, Winer's *Confessions of Christendom* (translated by Pope) will be found of great service. The

English editor has given admirable directions for the right use of the treatise. The student will also find in the tables at the end a trustworthy summary of confessional differences. When he has mastered these, he will do well to verify the statements which they contain by reference to the quotations from the original documents contained in the body of the book ; and then afterwards he will be able to construct for himself in detail a view of the characteristic variations in opinion on some of the central doctrines of Christianity, as the doctrines of Sin, of original Sin, of the Atonement, and, above all, of the Person of the Lord. In doing this, it must be his object to keep steadily in view throughout what is essentially and exclusively Christian in the scheme which he constructs, and what is connected more or less closely with the Jewish and Gentile preparations for Christianity.

For the interpretation of the xxxix. Articles, in addition to some one of the received text-books (Bp. Harold Browne, Burnet, Hey, Boulton,) the work of Rogers (Parker Society) will be found to be of interest, as it furnishes many contemporary illustrations. Laurence's *Bampton Lectures* and Hardwick's *History* must also be consulted.

4. LITURGICS.

The study of Liturgics includes an examination of all that belongs to public worship, Service-books,

vestments, ceremonies, buildings. A very complete discussion of the arrangement of ancient Churches is given in Bingham's *Antiquities*, vol. viii. [See also the article *Church* in the *Dictionary of Christian Antiquities*.] The ordinary Ecclesiastical vestments are sufficiently described in an appendix to Palmer's *Origines Liturgicæ*, and with elaborate completeness in Marriott's *Vestiarium Christianum*, or the *Dictionary of Christian Antiquities*. These details of dress and place have often far more than a merely antiquarian or artistic significance, but the real interest of Liturgics centres in the Service-books or directories of worship. These may be divided into (i) the Liturgies proper (the forms of the Eucharistic Service): (ii) other Service-books; and (iii) specially Hymns.

i. LITURGIES PROPER.

In dealing with the præ-Reformation Liturgies the student must pay special attention to the following questions.

1. The constituent parts of the Liturgy and their arrangement.

2. The characteristics of the Eastern and Western Liturgies.

3. The several subordinate types of the Eastern and Western Liturgies, i.e. ((a) Jerusalem [St James, St Basil, St Chrysostom], (b) Alexandrine, (c) Nestorian, (d) Ephesine [Mozarabic, Gallican (Ambrosian)], (e) Roman) and the history of their use.

The texts of the chief Eastern Liturgies are given in Renaudot's *Collectio*, and a selection of typical texts by Neale (*Tetralogia Liturgica* [St Chrysostom, St James, St Mark, Mozarabic]). A convenient English translation of five texts with an Introduction has also been published by Neale and Littledale. Hammond's *Liturgies Ancient and Modern* is a convenient manual, but the texts require a careful critical revision. Maskell has edited the different English Uses. The examination of the post-Reformation Liturgies must include some notice of the Lutheran and Reformed Services; but the various modifications of the English Communion Service (including the Scotch and American revisions) will form the most instructive subject of inquiry; and the student will do well to tabulate for himself the chief variations in order and expression of the successive revisions of the Service, and to compare the first Edwardian Liturgy, at least in its main outlines, with that of Sarum. Starting from this basis he will be able to trace the real continuity of the English Liturgy with earlier Liturgies, and to understand the principles which have regulated later changes.

ii. OTHER SERVICE-BOOKS.

The remaining Service-books of the Western Church may be studied in connexion with the English 'Prayer-Book,' which has points of connexion with nearly all of them. For this purpose

any one of the recent manuals on the Prayer-book will be a sufficient guide, *e.g.* by Procter or Daniel.

Procter's *History of the Prayer-Book* contains copious quotations from the older Service-books, with reference to original authorities. Neale's *Essays in Liturgiology* are full of rare erudition. Palmer's *Origines Liturgicæ* is a convenient and clear summary. The pertinent chapters in Bingham's *Antiquities* are fair and exhaustive of the materials at his command, for the early period.

Daniel's *Codex Liturgicus* gives a general collection of (1) Roman Catholic, (2) Lutheran, (3) Reformed and Anglican, (4) Eastern Services. The Continental Lutheran and Reformed Services have been collected by Richter. The Westminster *Directory* is added to most editions of the Assembly's *Catechism*. The Mozarabic Services have been reprinted by Migne in his *Patrologia*. The Services of the Copts, the Syrians, and the Armenians, have been very fully collected by Denzinger (*Ritus Orientalium*) [see also Malan, *Original Documents of the Coptic Church*]; and the Greek Services by Goar (*Euchologium*).

Students who wish to prosecute the subject in detail will consult Neale's *General Introduction* to his *History of the Holy Eastern Church*; Scudamore's *Notitia Eucharistica*; Freeman *On the Principles of Divine Worship*, and the older works of Leo Allatius, Assemani (J. A.), Card. Bona, Gavanti, Mabillon, Martene, Muratori and Zaccharia. But before following out later liturgical

developments they will do well to go back to the investigation of the Jewish Services, on which Zunz is the classical authority. It must however be added that no subject stands more in need of critical investigation than the history of the ancient Liturgies and the relation in which they stood to the Jewish Services. Bunsen's labours in this department, *Analecta Ante-Nicæna* iii., though he has brought together much important material, cannot be regarded as satisfactory.

iii. CHURCH HYMNS.

On the subject of Hymnology the great collection of Daniel is fairly exhaustive. Bingham has given a short notice of some of the more noted hymns used in the service of the Ancient Church (*Antiquities*, xiv.). Specimens of Syriac hymns are given in an English Translation by Dr Burgess (*Selected hymns...of Ephrem Syrus*). Many Greek hymns are found in Goar's *Euchologium*, and a selection has been admirably translated by Dr Neale. The Mediæval Latin Hymns have been fully edited by Mone; and smaller collections, as that of Abp. Trench, contain a fair selection of examples.

It will be evident from the outline which has been given that no student can expect to master all these subjects, even within the limits fixed from time to time, during his University course. Each Candidate for Honours must therefore make a

selection out of the whole range. A little preliminary reading will be sufficient to shew him in which direction he can work most profitably ; and when he has definitely made choice of some subjects for detailed study, he must be content to gain such a knowledge of the others as will enable him to feel the right proportions of the parts of the whole science of Theology, and to know the paths along which he must move, if at any later time he should wish to pursue investigations which he is obliged to neglect for the present. There can be no doubt that the highest honours will be within the reach of those who combine a thorough knowledge of one or two subjects with a fair acquaintance with the others ; and that excellence in one subject will be allowed to compensate for deficiency in another.

But while great freedom of selection is thus left to Candidates, every one will naturally make Holy Scripture a principal subject. Yet even here the choice must be limited after a time to the Old Testament or to the New, when the study advances to minute and original labour. It will however soon appear that this narrower work does not only increase special knowledge : it will increase power also. And the student who has entered fully into the examination of a single book of the Bible will feel able to appreciate with rapid intelligence the salient features of others. It cannot be too often repeated that the mere acquisition of secondary information exhausts and enfeebles, while all independent work strengthens and inspires. Each

subject, in a word, must be regarded in its sources; it must be regarded as a whole throughout its entire course; it must be regarded as one tributary to an illimitable expanse of Truth.

For Theology, it must be remembered, is a science alike of criticism, of construction, and of action. It is based upon a history, and it issues in life. The perfect Theologian, if we dare to imagine such a man, would require to be a perfect scholar, a perfect physicist, a perfect philosopher. And the sincere student of Theology will strive, according to his opportunities and powers, to gain a firm hold on the principles, at least, of scholarship, of physics, of philosophy. Such knowledge, it is true, is only the foundation of Theology, but it is the necessary foundation. When all this is gained, the memorable words still remain to be fulfilled, *pectus facit theologum*. The fruit of History is Doctrine; and Doctrine is the interpretation, the guide, the motive of life. The fire which quickens and illuminates the gathered materials must come from above, and be fed within day by day till the *Theologia viatorum*—partial, fragmentary, imperfect, to the last—is consummated in the *Theologia beatorum*, when knowledge is lost in sight.

APPENDIX.

REGULATIONS FOR THE THEOLOGICAL TRIPOS AFTER JANUARY 1884.

(Grace, June 2, 1881.)

1. The Theological Tripos Examination shall consist of two parts. The first part shall extend over four days, commencing on the Monday next before the first Sunday in June. The second part shall extend over eight days, commencing on the Friday next before the first Sunday in June.

2. No Student shall be admitted to the Examination, who has not passed or been excused the Examination in the Additional subjects of the Previous Examination.

3. A Student may be a candidate for Honours in the first part only, or in both parts, of the Theological Tripos of any year, if at the time of the Examination he shall have entered upon his eighth term at least, having previously kept seven terms, provided that not more than nine terms shall have passed after the first of the said seven terms.

4. A Student, who has obtained Honours in any other Tripos, or in a part of any other Tripos, may be a candidate for Honours in the first part only, or in both parts, of the Theological Tripos of the year next succeeding or of the year next but one succeeding. But no such person may present himself for examination if more than twelve complete terms shall have passed after his first term of residence.

5. Bachelors of Arts, who have obtained Honours in any other Tripos, or in a part of any other Tripos, may be candidates for Honours in the first part only, or in both parts, of the Theological Tripos of the year next succeeding or of the year next but one succeeding. But no such person may present himself for examination, if more than fifteen complete terms shall have passed after his first term of residence.

6. Bachelors of Arts, who have obtained Honours in the first part of the Theological Tripos of any year, may be candidates for the second part of the Theological Tripos of the year next succeeding. But no such person may present himself for examination, if more than fifteen complete terms shall have passed after his first term of residence.

7. A Student who has obtained Honours in any other Tripos, or in a part of any other Tripos, may be a candidate for Honours in the second part only of the Theological Tripos of any year, if at the time of the Examination he shall have entered upon his eighth term at least, having previously kept seven terms, provided that not more than twelve terms shall have passed after the first of the said seven terms. Such candidate will be required to satisfy the Examiners for the time being in three papers of the first part, viz. (1) Old Testament General (English), (2) New Testament General (Greek) and (3) either the History of the Church or the History of Christian Doctrine.

8. Bachelors of Arts who have obtained Honours in any other Tripos, or in a part of any other Tripos, may be candidates for Honours in the second part only of the Theological Tripos of the year next succeeding or of the year next but one succeeding. But no such person shall be allowed to present himself for examination, if more than fifteen complete terms shall have passed after his first term of residence. Such candidates will be required to satisfy the Examiners for the time being in three papers of the first part, viz. (1) Old Testament General (English), (2) New Testament General (Greek), and (3) either the History of the Church or the History of Christian Doctrine.

9. No Student or Bachelor of Arts of a higher standing shall be allowed to be a candidate for Honours in the Theological Tripos, unless he shall have obtained permission from the Council of the Senate.

10. The second part of the Examination for the Theological Tripos shall be divided into four sections. No candidate may present himself for examination in more than two of these sections.

11. Before the division of the Lent Term next preceding the Examination, the Prælectors of the several Colleges, or in the case of Non-Collegiate Students the proper officer, shall furnish the Senior Examiner with lists of the Students who intend to present themselves for examination, and in respect of the second part shall specify the section or sections in which each candidate intends to present himself for examination.

12. No candidate, who has presented himself for either part of the Theological Tripos Examination, may present himself on another occasion for the same part or for any papers thereof.

13. The Examination in each year shall be conducted by eight Examiners; two of whom may be appointed by the seven permanent official members of the Board of Theological Studies out of their own number, such appointments being signified to the Vice-Chancellor before the division of the Easter Term of the preceding year, and, if one or both of such appointments be not made in any year, an Examiner or Examiners for that year shall be nominated by the Board of Theological Studies and elected by the Senate, such Examiner or Examiners, however, not being entitled thereby to sit on the Board of Theological Studies; and the remaining six Examiners shall be nominated by the Board of Theological Studies and elected by Grace, three such Examiners being nominated in every year and proposed singly to the Senate before the division of the said Easter Term, who shall, if elected by the Senate, and also re-elected by the Senate in the following year, hold their office for two years.

14. There shall be a general meeting of the Examiners previous to the Examination, when the papers set by each Examiner shall be submitted to his colleagues for their approval.

15. The Examination shall be conducted according to the following schedules and regulations :—

SCHEDULE OF THE ORDER OF DAYS, HOURS AND SUBJECTS,
AT THE EXAMINATION OF CANDIDATES FOR HONOURS
IN THE FIRST PART OF THE THEOLOGICAL TRIPOS.

| DAYS. | HOURS. | SUBJECTS. |
|-----------|-------------------------|--|
| Monday | 9 to 12 1½ to 4½ | 1. Old Testament (General Paper). 2. The Book of Genesis or some other specified portion of the Historical Books of the Old Testament in Hebrew. |
| Tuesday | 9 to 12 1½ to 4½ | 3. Passages for Translation from the Historical Books of the Old Testament (Hebrew) generally; with questions on Hebrew Grammar and easy Hebrew Composition. 4. New Testament (General Paper). |
| Wednesday | 9 to 12 1½ to 4½ | 5. The Gospels in Greek, with special reference to some selected Gospel. 6. The Acts of the Apostles, the Epistles, and the Apocalypse, in Greek, with special reference to some selected portion. |
| Thursday | 9 to 12 1½ to 4½ | 7. The History of the Church to the death of Leo the Great. In each year an original work bearing upon some portion of the history shall be selected for special study. 8. The history of Christian doctrine to the close of the Council of Chalcedon, with special reference to the Ancient Creeds and other original authorities. |

REGULATIONS WITH RESPECT TO THE PAPERS IN PART I.

i. The General Paper on the Old Testament shall contain questions:

A. On the Contents of the Old Testament Scriptures, and on the History of the Jews down to the Christian Era.

B. On the Authorship, Date, Substance and form of selected portions of the Historical, Poetical, and Prophetical Books. Questions shall also be set on the History of the Hebrew Text, and of the Greek and English Versions.

ii. The Paper on Genesis or other specified portion of the Historical Books shall contain passages for translation from the Selected Portion, with grammatical questions, and passages for re-translation and for pointing.

iii. The Paper containing passages for translation from the Historical Books of the Old Testament generally, shall contain grammatical questions on those passages, and shall also contain questions on the Hebrew Language and Grammar generally, passages for pointing, and easy passages for translation into Hebrew.

iv. The General Paper on the New Testament shall be divided into two nearly equal parts, of which the first part shall contain questions on the formation of the Canon, and on Textual Criticism, and the second part shall contain questions on the Language and Grammar of the New Testament, and easy passages for translation into Greek.

v. The two Papers on (1) The Gospels, and (2) The remaining Books of the New Testament, shall contain passages for translation and re-translation, and questions on the subject-matter and exegesis of the Books generally; but questions on Authorship, Date and Textual Criticism shall be set only from the selected portions.

SCHEDULE OF THE ORDER OF DAYS, HOURS AND SUBJECTS,
AT THE EXAMINATION OF CANDIDATES FOR HONOURS IN
THE SECOND PART OF THE THEOLOGICAL TRIPOS.

Section I. Old Testament.

| DAYS. | HOURS. | SUBJECTS. |
|----------|---------------------|---|
| Friday | 9 to 12 1½ to 4½ | 1. The Book of Isaiah in Hebrew. 2. Selected portions of the Poetical and Prophetical Books in Hebrew and LXX., including always some portion of the Psalms. |
| Saturday | 9 to 12 | 3. Passages for Translation from the Old Testament (Hebrew) generally. Hebrew Composition. |

Papers (1) and (2) shall contain passages for translation, questions on the subject-matter, criticism and exegesis of the Selected Books, and passages for re-translation. Each of the three papers shall contain passages for pointing.

Section II. New Testament.

| DAYS. | HOURS. | SUBJECTS. |
|----------|----------|---|
| Saturday | 1½ to 4½ | 1. A selected Gospel (Greek) with some Patristic Commentary, and the Latin Versions. |
| Monday | 9 to 12 | 2. A selected Epistle or Epistles (Greek) with some Patristic Commentary, and the Latin Versions. |
| | 1½ to 4½ | 3. The New Testament (Greek) generally, with Greek Composition. |

The New Testament Paper shall contain passages for translation, criticism, and explanation, with questions on the subject-matter and history of the several books.

Section III. History and Literature.

| DAYS. | HOURS. | SUBJECTS. |
|-----------|----------|---|
| Tuesday | 9 to 12 | 1. Selections from the Apocrypha, the Apocryphal literature, Philo and Josephus. |
| | 1½ to 4½ | 2. Selected Greek and Latin Ecclesiastical writings. |
| Wednesday | 9 to 12 | 3. A Historical Period between the death of Leo the Great and the taking of Constantinople, with selected illustrative documents. |
| | 1½ to 4½ | 4. A Historical Period between the taking of Constantinople and the present time, with selected illustrative documents. |

The Periods in (3) and (4) shall be so chosen that the History of the English Church shall be prominently represented in one of them.

Section IV. Dogmatics and Liturgiology.

| DAYS. | HOURS. | SUBJECTS. |
|----------|----------|---|
| Thursday | 9 to 12 | 1. History and development of a selected Doctrine. |
| | 1½ to 4½ | 2. Subject from Modern Theology in connection with original documents. |
| Friday | 9 to 12 | 3. The History of Christian Worship with special reference to selected ancient Liturgies and Service Books, and to the history and contents of the Book of Common Prayer. |
| | 1½ to 4½ | 4. An Essay on some theological question arising out of the subjects of the section. |

16. If Ascension Day fall upon either of the Thursdays mentioned in the Schedules, there shall be no examination on that day, but the examinations appointed for that day and for the preceding days shall be held one day earlier (exclusive of Sunday) than is here provided.

17. The Board of Theological Studies shall determine from time to time the credit to be assigned to the several subjects enumerated in the Schedules.

18. Public notice of all the variable subjects selected for the Examination in any year shall be given by the Board of Theological Studies before the end of the Easter Term in the year next but one preceding the Examination.

19. A General Meeting of the Examiners shall be held to draw up separate class-lists of the first and second parts, and in each list the names of those persons who pass the Examination with credit shall be arranged in three classes, the names in each class being in alphabetical order.

20. The class-list of the first part shall be drawn up in accordance with the aggregate of marks of each Student, that of the second part on an estimate of the results of the Examinations in the sections considered separately and jointly.

21. In the class-lists of the first part the Examiners may affix marks of distinction in Old Testament or New Testament, or both, to the names of those candidates, who, in addition to the papers set in the first part, shall have taken one paper of the corresponding section or sections of the second part.

22. In the case of every Student who is placed in the First Class of the second part, the class-list shall shew, by some convenient mark, (1) the section or sections for which he is placed in that class, and (2) in which of the sections, if in any, he passed with special distinction.

23. No credit shall be given to a Student in any of the papers of either part, unless it appear to the Examiners that he has shewn a competent knowledge in that paper.

24. A Student who shall pass the Examination of the first part of the Theological Tripos so as to deserve Honours shall be entitled to admission to the degree of Bachelor of Arts, provided that he shall have kept the requisite number of terms at the time when he applies for the degree.

25. A Student who, having previously obtained Honours in some other Tripos, shall pass the Examination of the second part of the Theological Tripos so as to deserve Honours, and shall also satisfy the Examiners in the three papers aforesaid of the first part, shall be entitled to admission to the degree of Bachelor of Arts, provided that he shall have kept the requisite number of terms at the time when he applies for the degree.

26. On the eighth day after the end of the second part of the Examination the Examiners shall publish the class-lists in the Senate-House, and shall send to the Vice-Chancellor a list of those persons who shall acquit themselves so as to deserve the Ordinary B.A. Degree, or to be excused the General Examination for the same.

27. Each of the Examiners elected by the Senate shall receive Twenty Pounds, and the sum of five shillings for each candidate beyond the number of twenty examined by him, from the University Chest.

THE LAW EXAMINATIONS PRIZES AND DEGREES¹.

THE main object of the present article is to describe the scheme of legal education at Cambridge marked out by the amended regulations for the Law Tripos which have recently (1887) been proposed by the Special Board for Law and received the sanction of the Senate. This scheme, being the result of considerable deliberation and repeated discussion, is likely to enjoy a comparative degree of permanence; while the number of students affected by it is large and increasing. A few remarks, therefore, upon it may be acceptable, from one who has had some share in drawing it up, together with a good many years' experience of legal studies and examinations both in Cambridge and elsewhere. This position of the writer will, he hopes, excuse an occasional use of the first person, particularly where he is giving utterance rather to his own opinions than to those expressed, in various reports, by the Board over which he has had the honour to preside. An apology may

¹ The following matter forms Chapters I. and III. of a book entitled "Cambridge Legal Studies" by the same author, the omitted chapter being a historical account of earlier legal study at Cambridge.

also be due to the general reader, for a degree of technicality in speaking of University arrangements. Some acquaintance, however, with the system referred to must unavoidably be presumed, as, without such acquaintance, the bearing of this paper would be scarcely intelligible.

Two general questions—whether law can be successfully taught at all in Oxford and Cambridge, and whether examination is a good or bad medium of education—may be noticed here, but must be passed over very briefly. The first has been, and probably will be, often debated as a matter of argument: as a matter of practice, it seems to be, for the present, taken as settled, by the encouragement accorded to University Law Students on the part of the London authorities who control the *entrée* to both branches of the legal profession in England. I do not think this encouragement is to be entirely accounted for by the feeling which I may broadly term a “preference for gentlemen,” in the production of whom the old Universities of course claim no monopoly. The case, I hope, rather is, that some amount of previous University culture, intellectual as well as social, is found desirable, even by the strongest advocates of a practical legal education, and even at the cost of a little time and money.

The recognition, to which I am here referring, by the profession, is duly valued at Cambridge and Oxford, and the practical character which it tends to impress upon the University study of

law has undoubtedly added a great interest and stimulus to the latter. It must not however be forgotten that the proper function of a University is, according to the old theory—not yet, I hope, exploded—first, to educate its students, and second, to prepare them for their special business in life. This principle is implicitly recognised by the London authorities just referred to, in their selection of the subjects upon which they do and upon which they do not delegate their examination tests to our provincial tribunals. The same principle has been fully taken into account in the present scheme for the Law Tripos. One of the chief results contemplated by the division of the examination into two parts is the suggestion of a normal course of reading, wherein the subjects which may rather be considered as forming part of a high class general education will come first, and those which approximate to actual practice last.

Of examinations in general an old *ex-officio* labourer in that field is not always found to speak with much enthusiasm. Since, however, there is no substitute which is in the slightest degree likely to be accepted in their stead, we must obviously endeavour to make the best of what some among us regard as a necessary evil. Whether we like them or no, examinations are an accomplished fact, and a great part of our educational system. Equal, or greater, in importance is the proper organisation of a teaching staff: but that subject, rendered, as it is, very difficult from the number

of independent authorities whose cooperation is necessary, lies still, for the most part, *in futuro*.

The connexion of the teaching with the examining body is not looked upon with so much favour at Cambridge as in some other Universities, and it has been thought desirable, on the whole, to abolish the standing *ex-officio* examinership of the Regius Professor of Civil Law. On the other hand, the office of examiner has been thrown open to persons not members of the Senate. It may be observed that the power to nominate such persons for election would give the Cambridge Law Board an opportunity of requesting and considering recommendations, for examinership, from the Council of Legal Education and the Incorporated Law Society. This is merely thrown out as a suggestion; but I certainly think that any such recommendations would be well received by the Cambridge Board. If thereby any joint arrangement could be made between the London and University examining bodies, it might not be unreasonable to hope for slightly improved terms of admission, in the case of University candidates, to the respective positions of Barrister and Solicitor.

In passing from these general observations to the scheme itself, it must be first of all observed that no new subjects are introduced into the Law Tripos. The principal changes are, the division of the examination into two parts, the more searching treatment of Roman and English law by an

increased number and more definite assignment of papers, and the fuller recognition of original thought and literary power, in the addition of a second essay paper besides that already devoted to essays and problems. Moreover, General Jurisprudence as a whole, and English Constitutional Law and History as a whole, will henceforth be standing subjects for the students of every year; their previous treatment in variable portions not having been considered satisfactory.

The intention of the scheme throughout is to define and assort the subjects in the most general terms, specifying no books but the Roman Institutes and Digest, and leaving a very free power of making special arrangements for each particular year to the Board. It is competent to the members of this body to emphasise particular portions of any subject, if they think fit, for more detailed preparation. They are also, as before, expressly empowered, from time to time, to *limit* any of the subjects to a department or departments of the same; and the Roman Digest must, from its great extent, be always represented by selected portions. It is not, however, apprehended that the power of exclusive limitation will be very extensively employed. Its use has been expressly deprecated in the case of Jurisprudence and English Constitutional Law; and it has been hitherto avoided in the case of English Property Law, in consideration of the admission of Certificates on that subject by the Inns of Court, in lieu

of part of their own examination. That reason has however now (1891) ceased to exist. See below p. 56.

What further guidance is required, by the student or examiner, beyond the yearly regulation of subjects by the Board, will be found in the list of books recommended from time to time by the same body. Amongst these, bold type is employed to indicate which are to be read as text books, or as books of principal importance, and which are rather to be consulted for purposes of reference. The last editions of all, as of the Law books in general belonging to the University, are retained, for consultation, in the Law Reading Room of the Library, which is furnished with a special catalogue, besides being roughly divided into compartments under the leading heads of Jurisprudence, Roman, International, Foreign and English Law. Further local subdivision by subject-matter is found incompatible with the continual addition of new books; but an index of subjects, printed at the end of Sweet's Law Catalogue, is kept in the room. By means of this the authors' names can be found, under which the Library catalogue is alphabetically arranged.

Before considering the subjects of the Tripos in detail, it may be well to add a few practical remarks to what has been premised above, on a point sometimes too much lost sight of in new schemes of examination. With the two exceptions of Jurisprudence and Constitutional Law—both

of which subjects it was perfectly competent to the Board to set in their entirety under the old system—the increase of work to be henceforth required is rather apparent than real, and the total amount not excessive. A more ambitious—perhaps a more satisfactory—programme might easily have been drawn up; but the ideal course of study, which suggests itself at first sight to a reformer, has to be considerably modified when the actual working power, with which he has to deal, is taken into account.

The time and thought at present devoted by University students to amusements in general and athletic sports in particular is, in the opinion of some authorities, unduly great. A reaction may possibly be expected on this head, though that will depend rather on the British public than on the Universities or the great Schools, both of which are a good deal influenced by what the British public requires of them. But, even under such presumably improved conditions of study, the fact will remain that all large bodies of students, such as we shall generally have to deal with in the case of law, are very unfavourably affected by a too wide range of examination subjects. The few men, who rise to the occasion and do extra work, would probably do it *proprio motu*, or on private advice, without the stimulus of any examinations or degrees at all. The majority, for whom we must, after all, mainly legislate, and who do need that stimulus, can best be brought

up to a fair standard by judiciously moderating, clearly expressing, and very gradually raising the requirements made upon them. Otherwise, they despair of the whole thing or treat it as a lottery. Hence come the "tips," the "cramming" and the death-bed repentance of those unfortunates who no doubt deserve the plucking which they undergo, but are yet to some extent the victims of an injudicious programme.

The total amount, then, of preparation, for the two parts of the new Law Tripos, will perhaps necessitate a little more work than the average of what has been hitherto required for the undivided old one, but certainly not more than can be done by a fairly intelligent young man, with a moderate knowledge of Latin, in two years' regular study. This amount of time *at the least*, is required, and can be secured by all who do not unduly postpone passing their "Little-Go," after which a Cambridge Honour man has no further University examination but that of his Tripos. The Little-Go—in official language the Previous examination—can be passed at the outset of our University course, and should be so passed by all who wish for sufficient leisure to qualify themselves for the higher distinctions in their Honour examinations, or to make sure of passing those examinations at all.

I may add to these remarks upon the amount of work required for the Cambridge Honour course in Law, that the division of the examination

furnishes a merciful means of timely discouragement in cases of probable failure. The interesting subject-matter of the Law Tripos, the practical utility of the study, and a very false opinion—based upon a state of things which has long ceased to exist—that this is an “easy” avenue to a degree, yearly attract to the examination candidates who are insufficient, either in calibre or in application, to attain Honour standard. Their disillusionment is one of the most disagreeable duties of the examiners, and a pluck at the end of a man’s three years entails an additional amount of money, time and trouble, scarcely compensated by the Ordinary degree which he may ultimately obtain. Students who, under these new Regulations, take the first part of the Tripos examination at the end of their second year—as all are strongly recommended, though not obliged, to do—enjoy at least one advantage, in case of failure. They have still a year left, in which they can adopt a line of study more suitable to their powers, and may, without much difficulty, succeed in obtaining the Ordinary degree of B.A. in the ordinary three years’ course.

I pass now to a more detailed consideration of the Tripos subjects as re-arranged. These are divided into two classes, the former comprising those which may be regarded as forming part of a high-class general education, the latter those which bear directly upon the practice of English Law. A student cannot be a candidate for Honours in

the latter class, unless he has obtained them in the former, or in some other Honour examination of the University—an alternative to which fuller reference will be made a little farther on.

In the first part of the Tripos, which is intended to be taken, as has been above remarked, at the end of an undergraduate's second year, a prominent place is occupied by Jurisprudence and Roman Law. The latter subject will always require, for success if not for safety, some knowledge of legal Latin. However much the Institutes may be replaced by translations, it is scarcely possible that this can be the case with the variable Titles set from the Digest, still less with the illustrations from the Digest at large, which must continually occur in any good text book on the Institutes themselves.

This necessity of Latin is frequently urged as an objection by those who are against the retention of Roman Law at all, in an English legal education, or at least against its retention in the original language. On the other side we find alleged old usage, the opinion of high modern authorities, and the academical argument that, if legal examining bodies in London retain this semi-classical subject, *a fortiori* should Oxford and Cambridge. But there are also strong intrinsic reasons, apart from precedent and authority, for such retention in the normal University course of legal education. I say the normal course, because it should not be forgotten that there is an alternative allowed in the present Cambridge scheme, by which the diffi-

culty of Latin may be avoided, at least so far as connected with law.

To take the alternative first. A student who obtains Honours in any examination of the University, other than the Law Tripos, may entitle himself to a Law degree by obtaining Honours in *either* part of the latter examination. He may therefore so entitle himself, if he elect the second or purely English part of the Law Tripos, without any more knowledge of the classical tongues than is required from every undergraduate in order to pass the Previous examination (Little-Go).

This concession was, I think, mainly suggested by the case of Mathematical Honour men wishing subsequently to take up Law. There are, however, other Honour subjects more cognate to Law, or which might be regarded as a better preparation for it—such as Moral Science, in the wide sense in which that term is used at Cambridge, Classics, or History. It seemed to the Board, on the whole, best to make no selection, but to assume that a fair groundwork of intellectual culture may be laid by *any* of the superior or Honour courses of University study, without distinction.

So much for the alternative referred to, which will, probably, never be adopted in more than a very small percentage of the entries for examination. The scheme of study primarily intended by the Board is, of course, the normal one, which includes Roman Law and involves the difficulty of the Latin language.

This difficulty is often greatly exaggerated. Few of our law students are brought up in entire ignorance of Latin; and, as a matter of general education, it would be surely better for the number to be diminished rather than increased. The particular specimens of that language which are in point, have not perhaps the elegance, but neither have they the difficulty, of Cicero and Virgil. For the style of Justinian's Institutes and Prefaces there is certainly not much to be said, but the meaning is generally quite clear: the Commentaries of Gaius, and the extracts from the Digest, are almost always sensible in their conclusions—if the conclusions are sometimes based, like our own Coke's, upon strange premisses—and they are always, in their expression, a model of nervous and concise language.

For the subject-matter, as distinguished from the language, we cannot claim, in England, that direct practical utility which it possesses where, as on the Continent and in some of our own Colonies, Roman forms almost a substantive part of modern Law. *Our* Law is mainly of indigenous growth, the transcripts by our early text-writers from Justinian or his commentators are rather by way of illustration than adoption, the formation of law by cases is almost peculiar to ourselves—in fine our whole system has a decided insularity, of which we are perhaps sometimes a little too proud. The exclusive study, therefore, of English Law might, in some minds, lead not merely to a degree of pre-

judice and opposition against reform, but to a certain narrowness of view, and an inability to recognise the proportionate importance of different parts of our own system. Nothing is so good a corrective for these faults—which it would seem to be the proper object of a University education to correct—as the comparison with an entirely foreign system; and, for that comparison, Roman Law appears to have exceptional advantages. Its subject-matter was the result of long and uninterrupted experimental development among the most practical of nations; its Institutional scheme of arrangement, at the close of that development, was a scientific one expressly made for educational purposes; both arrangement and subject-matter enter largely into many modern bodies of law; and the former, at any rate, was roughly followed by our own leading Institutionalists, Hale and Blackstone.

Much of the advantage here attributed to the study of Roman Law might appear to be obtainable from the Institutes alone; and it has therefore been occasionally proposed to dispense with the Digest subjects, which undoubtedly cause the most part of the linguistic difficulty. This proposal has not been and is not likely to be accepted by the Law Board of Cambridge. Quite apart from its convenience as an examination subject, the Digest alone can give a life and meaning to the dicta of the Institutes, which would otherwise pass through most minds as a mere string of theoretical proposi-

tions. The selected portion of the Digest, in fact, furnishes, to the necessarily standing book-work of the Institutes, an admirable series of illustrative problems, and those problems must, like all others, be from time to time varied.

A professor of Roman Law may perhaps lie under some slight suspicion, in his plea that there is nothing like leather; and it would of course require some resolution to propose or acquiesce in the happy despatch of one's own subject. The writer may perhaps therefore be excused for observing that he has had, from official experience at Cambridge and elsewhere, not less to do with legal education as a whole than with Roman Law in particular, and that he has practically found the latter by no means the least interesting or suggestive part in the legal *curriculum*. It was remarked, in the best attended discussion on the proposed changes at Cambridge, that the strongest defence of the Digest came from one who had just passed from the ranks of the students. We may certainly question whether an equal amount of work would be substituted in the place of Roman Law, if abolished, and may, even on this account, believe that its abolition would be an injury alike to the Universities and the legal profession.

Somewhat more special attention has been drawn, in the present scheme, than previously, to the general principles of Roman Law—as apart from the text of the Institutes and Digest—and to its history. The lower limit, in point of time,

of the latter subject is not fixed. There is no doubt that the tracing down of Roman Law to modern times, and the comparison of Continental systems with one another and our own—so far at any rate as they have anything to do with that common heritage of antiquity—would be a most valuable addition to any course of legal education. Although, however, not excluded by the terms of the scheme just sanctioned in Cambridge, it is at present found too much to be included in that scheme's practical working. Some of the results of such comparison may perhaps be introduced under the wide head of General Jurisprudence.

This last named department, which is among the most valuable of all to the teacher for attractive interest and to the examiner for testing power, labours under the disadvantage of a somewhat indeterminate subject-matter, and a very intractable text book.

Most teachers of Law will agree that some general principles and definitions, coupled with some broad scheme or classification of subject-matter, would be a valuable preparation for all legal study. Many, however, question, with reason, whether such scheme, principles or definitions would have any living meaning, unless illustrated by an actual body of Law. It is for this purpose that Roman Law, with the scientific classification of its Institutes, and the general acceptance of some of its principles and distinctions in many modern systems of Law, has a peculiar value when

studied, as it always should be, with an eye to Jurisprudence. The designation of this last named subject as *General or Comparative* has been abandoned. Any work on General Jurisprudence, which is not mere *a priori* speculation, must, in the opinion of the present writer, be Comparative, as regards the various systems and portions of systems, upon an observation of which it is based by its author. But to require such a comparison to be made by the student, before he has mastered more than one system of Law, would be an absurdity. One of the main objections against Austin's Lectures, as an introduction to the study of Law, is, that, while they rightly connect with Jurisprudence the comparatively simple subject of Roman Law, they also presuppose a somewhat detailed acquaintance with English. Now, when treated as an introduction, the generalisations of Jurisprudence must necessarily be stated, like other definitions and axioms, almost exclusively of the particulars from which they are gathered, except such illustration as can be furnished by the one simple system taught together with them. Any fuller comparison of different bodies of Law should either be expressly specified and limited for students in the earlier part of their course, or only recognised in the later; where its best place would be, as suggested by the Cambridge Law Board, among alternative subjects for essays.

The use of Roman Law to which reference has just been made is obviously kept in view throughout

the whole of Austin's great work. This, although open to other objections besides that above stated, cannot yet, in the opinion of the Board, be discarded as the text book of Jurisprudence. Until there can be found some more complete and at the same time more easy and elementary substitute than has yet appeared, it seems unavoidable to make his Lectures the *pièce de résistance*, supplementing them, where necessary, with books or portions of books on the same subject by other authors. With regard, moreover, to the Lectures themselves a great part must be played by the teacher or lecturer, in pruning their burdensome amount of detail, enlarging their limited point of view, and correcting their occasional historical errors.

Public International Law stands, it must be admitted, at first sight in somewhat incongruous company with the other subjects selected for the former half of the Law Tripos. Its foundation, however, and more elementary principles have a close connexion with some of the leading topics of General Jurisprudence ; its deduction, in part, from Roman Law, has at any rate the authority of its great founder Grotius ; its history, with its simpler rules and cases, will generally be found very attractive to University students of Law. More complicated questions, such as require some knowledge of modern municipal law, may come, as subjects for essays, in Part 2 : but that part would have been much over-weighted by the insertion of

Public International Law bodily. Little support has been found for a proposal to omit this interesting subject from the University *curriculum*, rendered, as it is, more interesting by the Whewell scholarships and Professorial lectures. This endowment has hitherto been applied principally, if not entirely, to the teaching of Public International Law. Nor has it been thought desirable to include the more technical rules known, properly or improperly, as Private International Law, in the Tripos.

English Constitutional Law and History, including (as one of the Reports of the Board interprets the list of subjects) a general view of the present English legal institutions, complete the more educational or introductory part of the Law Tripos. A great difficulty on this extensive subject is to find some manageable text book, which shall be at once compendious and trustworthy. But it was the almost unanimous opinion of the authors of this scheme, that the method, which had been lately followed, of requiring one period only from men belonging to a particular year, was very unsatisfactory, and that *all* ought, in spite of difficulties, to know something of the Constitutional Law and History of their country, as a whole. The "general view of present English legal institutions" is not a very clear expression, and will require elucidation by the notices of the Law Board. My own impression is that something like the subject-matter of Blackstone's first volume

(except the law of purely private conditions) was intended.

An essay and problem paper, upon the subjects of the first part of the Tripos generally, is added, in which the present system of *alternative* questions or theses will doubtless be maintained.

The second, or more purely practical, part of the Law Tripos requires but little explanation. It consists almost exclusively of English Law other than Constitutional Law and History. There was no particularly strong reason for divorcing the last-named subject from the remaining part of English Law, except that it seemed distinctly to belong to a high class general education, while the remaining part was quite enough for one year's undivided work.

The very inconvenient separation of Real and Personal Property Law into two several papers is now authoritatively avoided—as it has long been, unauthoritatively, in practice—by the assignment of two papers to these subjects jointly. Contract, instead of its former unrecognised existence as a questionable part of Personal Property Law, is similarly coupled, for convenience, with Tort, in two substantive papers.

In view, partly, of recent legislative changes, it was not considered desirable to take Equity as a separate heading, but to include the Equitable principles applicable to each of the subjects specified, together with those subjects.

Criminal Procedure has been expressly coupled with Criminal Law, and Evidence added to the

same paper. The last-named large and somewhat technical subject will probably require occasional limitation or definition by the Board.

The second part of the Tripos also includes a sixth paper, of subjects for essays, in which it is provided that the essays shall have reference partly to the subjects of the first and partly to those of the second part. The intention, in including the former, was to recognise any more advanced knowledge which might be acquired, on the subjects assigned to the first part, either from illustration of those subjects by reading for the second, or by further study of those subjects themselves. The cases more particularly suggesting themselves to the Board were those of General Jurisprudence and Public International Law. There was indeed a feeling that no part of the University course of reading should be finally dropped, before the end of the University career, which formerly induced the Board to object to a division of the Tripos. And although that feeling has had to give way, on the point of division, to other considerations, it has prompted this endeavour to give some encouragement, in the second part of the Tripos, to a continuance of study on the subjects of the first. Over-pressure of work upon the weaker candidates for both parts, or unfair disadvantage to outside candidates for the second part only, will be obviated by the adoption, here as in the former essay and problem paper, of a sufficient number of *alternative* essay-subjects.

The **Law Degrees** of the University of Cambridge are simplified and rendered more generally intelligible by the new Regulations. Vested rights are, of course, not interfered with. Masters of Arts or Bachelors of Law, who were admitted to those degrees before July 31, 1858, are entitled to proceed to the degree of Doctor of Law without more examination than is involved in the keeping of an Act; as are also Masters and Bachelors of Law becoming entitled to proceed to those degrees at or before the Law Tripos (under the old system) of 1889. The last class includes, besides persons who have taken Honours in the Law Tripos, a number of Bachelors and Masters of Arts, who have passed, under the old Regulations, an examination, for a law degree, varying from time to time both in subject and difficulty, and recently consisting of the three papers on English Property and Criminal Law in the Law Tripos. A different provision has now been made for such cases. There will still be members of the University, no longer young, desirous of proceeding to the Master's and so to the Doctor's degree in Law, although they have not studied in the ordinary course for Honours. The Board felt that the requirement on such persons, to show a knowledge of all the various subjects comprised in the whole Law Tripos, would be not only severe but also unlikely to promote thorough study. On the other hand, they held it to be extremely desirable that the Law degrees should henceforth indicate some

uniform attainment of Honour standard. It was therefore decided that the case of such older candidates which was more likely to occur and more worthy of consideration might be met by the alternative previously referred to, of satisfying the examiners for the Law Tripos in *either* part, if Honours have been obtained in any other University Examination. Otherwise satisfaction must, it was considered, be required in *both* parts, which might be taken either in the same or in different years. The only difference, then, between these older candidates and those who present themselves within the ordinary time from matriculation in the University is, not in degree—for which there is no superannuation—nor in the minimum standard required, but in the fact that the former are merely returned as *satisfying* the examiners, it not being considered fair that they should come into competition with presumably younger men for place-distinctions and prizes.

With the exception, then, of two small and diminishing classes of persons, every Cambridge Law degree, after the Tripos (old style) of 1889, will signify that its possessor has attained at least the minimum standard for Honours, either in both entire parts of the Law Tripos, or in one such part after attaining the same standard in some other Honour examination of the University. The degree of Master, in Law as in Arts, will indicate no further qualification but the completion of three years from taking the original Bachelor's degree,

whether in Arts or Law. The degree of Doctor will indicate, as it does at present, the completion of five years from taking the degree of Master of Law, and also the having kept an Act.

The Act in Law is still an oral exercise; including questions, by the Regius Professor or other graduate of the faculty of Law, who presides, upon the subject of the thesis, or occasionally of a more general nature. The substantial part, however, of the work is the production of an original treatise upon the subject, which is selected by the candidate, with the approval of the Professor, from Roman, English, or International Law, or from Jurisprudence. Subjects are, of course, preferred to which the candidate has devoted some special attention, professional or otherwise. The treatises have been for some time, in practice, of considerable merit, and are often printed, either before or after the Act is kept. It was under the consideration of the Board whether previous printing should not be in all cases required, as a means of testing the originality and sufficiency of the treatise. As, however, the expense involved would be considerable, it was ultimately agreed that the same objects might be regarded as fairly secured by the previous transmission of a copy of the exercise, written or printed, to the Regius Professor or presiding graduate.

The **places** and **prizes** of the Law Tripos are, as distinguished from the Law degrees, confined to candidates who do not exceed a specified Academi-

cal standing. The former distinctions are found in two separate lists published for the two parts of the Tripos, each divided into three classes and arranged throughout in order of merit. It was considered by the Law Board, after some discussion, that the retention of this order, with a free use of brackets, would represent real differences in the fairest and most intelligible manner. No regulation is made about *marks*, but it has been the practice for some time to assign an equal amount to all papers, to maintain uniformity of standard rather by a certain continuity of examiners than by observing an exact numerical equality for the same places between year and year, and to refuse all information either as to details or totals. Advice, however, is freely given to candidates for other examinations, as to their weak points, upon which further study would be desirable.

Two prizes are offered, one for each part of the Tripos examination, in cases of exceptional merit—the George Long prize, among candidates for the first part, for Roman Law and Jurisprudence; the Chancellor's Medal, among candidates for the second part (and certain other students of Bachelor standing), for that part of the examination, so far as it relates to English Law. This use of prizes has been much canvassed, especially in the case of the Chancellor's Medal, for which an independent examination was originally required. The feeling, however, of a majority in the Law Board and the

Senate has been that, under present circumstances, a more beneficial result may be attained by inducing some portion of the numerous candidates for the Tripos to aim at a high standard, for the sake of these prizes, than by attracting, to some independent work, such very small numbers as were found to present themselves for the Medal Examination when separate. The experiment, as the present regulation should perhaps be considered, has scarcely been tried long enough to enable a judgement to be pronounced upon its success.

The regulations in detail, relating to Cambridge Law examinations, prizes and degrees, will be found below (p. 35). I have also added (p. 55) the Rules for call to the Bar and admission to practice as Solicitor, so far as they contain any special provision for University candidates.

The Law Special. The above remarks are confined to the Honour course of legal education at Cambridge, for which alone, in that University, Law degrees are conferred and certificates granted. On the course for the Ordinary degree a few words must here be said, with reference to the "Special" examinations forming the close of that course, one of which is in Law.

It is possible for the Poll Man to pass his Previous and General Examinations by the end of his fourth term. This leaves him, out of the regulation three years, one year and two terms' reading, at the outside, for his final or "Special"

examination. It is a very short space of time during which the Law Board, in advising the University, have to make what they can of the Law Special Examination, as an instrument of legal education. Their task is not an easy one, and the successive attempts to perform it can scarcely be considered as satisfactory. Latin was first dispensed with, and the Board finally decided to abolish Roman Law altogether, as a subject for the Ordinary degree, contenting themselves with the more moderate requirement of English Law, and that confined to certain departments. The addition of voluntary papers on select cases will, it is hoped, furnish a test and a reward for intelligent reading. The division of the examination into a first and second part suggests, as in the case of the Tripos, a certain *order* of study, and may also afford a timely warning-off to the weak candidate (above, pp. 3, 9). The new regulations for the Law Special, which come into effect, as to Part 1, in 1892, are printed below (p. 47).

It will be seen that the reading for this examination, if thorough, will be neither useless nor contemptible; but it is scarcely to be called a legal education. At any rate, both the time and the scope of the study are too limited to deserve a degree in Law, or a certificate exempting from any part of the London legal examinations. The best treatment, in my opinion, of a candidate for the Ordinary degree at Cambridge, is to turn him,

if possible, into a candidate for Honours. As such, he may, of course, idle through his time in the hope of scraping, with luck, into a third class. Such luck, however, is rare, at least in Law, and I have great hope that idleness is becoming rare also, in the Honour man. He has, at all events, had open to him a wide and truly educational course of reading, instead of the repetition of what is not much more than mere school work twice over, followed by the somewhat arduous attempt to assimilate an entirely new class of subjects in his last year and a half.

Lectures, with other instruction in legal study, are given by the Professors, the University Readers, and the College lecturers or other teachers recognised by the Special Board for Law. A list is issued by the Board at the beginning of each term. This is posted on the door of the Arts' School, at present used for the purposes of the old Law School (which is now entirely absorbed in the University Library), and on the screens of the different Colleges. It is also published in the University Reporter, the particular number of which (price 3*d.*) may be obtained from Messrs Deighton, Bell and Co., Cambridge.

The subjects of the Downing Professor of the Laws of England, the Whewell Professor of International Law, and the Reader in English Law speak for themselves. The Regius Professor of Civil Law combines, with that subject, Jurisprudence. For the Reader in Indian Law and the

other lecturers, reference must be made to the published list.

The Colleges at which special Law Lectureships have been established are, Gonville and Caius, Trinity Hall, St John's, Trinity, Christ's and Downing. A somewhat greater degree of personal supervision of study is perhaps received by undergraduates belonging to these Colleges, from their particular College lecturer; but, generally speaking, I believe that each course of instruction is now, by means of the Intercollegiate system, practically open to the whole University. Any fees which are payable are announced in the above mentioned list.

Scholarships, Fellowships, &c. The only University Scholarships devoted to the promotion of legal study are those of Dr Whewell's foundation, the regulations for which will be found below (p. 50), together (p. 53) with those relating to the Yorke Prize. The latter is open to graduates of the University of Cambridge, for the best essay upon some subject relating to the law of property.

As to College Scholarships, application should be made to the Tutors for information, the practice of individual Colleges varying considerably and being by no means in a final condition. Speaking generally, I believe that little encouragement is given to Law by way of Minor or Entrance Scholarships, except at Downing. Most of the Colleges recognise or propose to recognise pro-

ficiency shown in Law at the Annual College Examinations, as one qualification for Undergraduate Scholarships and Exhibitions. Here again however the legal student appears to stand in a rather more favourable position at Downing than at the other Colleges.

Studentships are open, at Trinity Hall and St John's, to the competition of graduates of those Colleges who intend to prepare themselves for practice in the profession of the Law. These Studentships are of the yearly value of £50 at Trinity Hall and £150 at St John's. The latter (the McMahon Law Studentships) are a comparatively recent foundation, and are not sufficiently known to intending practitioners.

With regard to **Fellowships** the study of Law stood, until very recently, at a disadvantage as compared with other studies, which were considered, not without reason, to represent a better education and to attract a superior order of power. As, however, the importance of the Law Tripos has increased, not only from the greater number of students who enter for it, but from the undoubtedly higher standard attained by the best men, and from the better appreciation, at Cambridge and elsewhere, of the studies with which it is connected, an increasing encouragement has been given to proficiency in Law, by way of College honours and endowments. Fellowships have been already awarded, on the strength of Law, or Law and History combined, at Downing,

Trinity Hall and King's. There is reason to hope that the example may be followed by other Colleges also, now that it is beginning to be understood that the Law Tripos represents a very wide extent of useful reading, in which it is no easy matter to attain the real distinction of a first class, or even the very respectable position of a second. For the lower part of our list, of course we cannot claim rewards, but a considerable amount of experience as an examiner justifies me in asserting that it is now a very rare occurrence for an idle or ignorant man to obtain a Cambridge degree in Law.

Practice. Students who are preparing for practice at the Bar enjoy, in their London career, certain advantages, direct or indirect, from the course of legal study at the University. These, however, will be best seen from the actual Regulations of the Inns of Court, of which those most in point are set out below (p. 55). A few remarks are there added respecting candidates for admission as Solicitors.

For practice itself—if I may return for a moment to a subject briefly dismissed at the beginning of this article—the once prevalent belief in the inutility of Cambridge legal study is, I hope, wearing away. Even in Roman Law a certain amount of direct profitableness has been admitted, in respect of our Ecclesiastical and Admiralty Jurisdiction. And although the Doctor's degree is no longer a necessary qualification for

practice in Courts of this character, it is, as I am informed, by no means without its indirect advantages in the large class of cases where continental law and litigants are concerned. But I prefer to rest the benefits derived from the course of legal study at Cambridge upon wider ground.

These lie partly in the nature of the study itself, partly in the local circumstances under which it is pursued. The subjects to which the reading of students is directed are mainly the principles or scientific part of Law. The importance of laying a foundation of these, before essaying practice, is generally insisted upon by the writer on law, as distinguished from the practitioner. But even from the latter's point of view the advantage of beginning with a scientific education will seldom be seriously contested. We may leave it to those who have begun legal work, as too many still do, without this education, to say what time and labour they might have spared themselves by having the general principles of their Law ready to hand, instead of being obliged to learn them piecemeal from the incidental requirements of practice.

These remarks apply, at any rate as far as English Law is concerned, no less to Solicitors than to Barristers. It is surely from an unfair point of view that the former are sometimes considered as merely capable of technicalities, while the whole science of Law must be left to the higher branch of the profession. Nor is this

merely a question for the dignity of the practitioner, but for the interests of the client as well. These are in some risk, if the adviser consulted in the first instance, by whom the wishes or grievances of the consulter are first put into legal form, is unable to rise above the barest empirical handling of the facts before him. Instruments of extreme importance, and involving a knowledge of the principles of Law, must not infrequently, from mere pressure of time, be drawn and executed, especially in the country, without submission to Counsel. The decision, again, whether recourse to a court of law is, under the circumstances, advisable or not, lies mainly in the Solicitor's hands. It is equally unfortunate if, in the first case, his unscientific work leads to subsequent litigation, and, in the second, all that he can do is to recommend proceedings and draw a brief.

But undoubtedly the advantages of the educational method here recommended are most evident in the training of those who seek the higher dignities and the positions of more extended usefulness to which the Bar is an avenue. The superiority of the scientific over the empirical lawyer is nowhere so patent as in their respective qualifications for the post of judge, or of legislator. The former office, too, at least in England, continually involves the latter, and in a manner which, because indirect, is less subject to constitutional checks. Hence the special importance

that an English judge should be one whose mind is not a mere repertory of unconnected precedents, but a well-ordered system of principles and experience combined.

In legislation direct and proper the capacities and the incapacities of the lawyer have been often observed. The value of professional experience is incontestable. Without its assistance the most acute men of business and the sincerest patriots would alike make most hazardous additions to our statute-book. But, for the statesman-like width of view and the reforming spirit, which ever strives to bring harmony and simplicity out of confusion, an element beyond that of mere technical training is necessary. And this element it is the special function of the study of General Jurisprudence to supply.

That the views above stated are not mere theory is testified by the express opinion of our most eminent practical men. Reference on this subject may be made to the speech of Lord Selborne (Sir Roundell Palmer) in 1871, on his proposal for the establishment of a general school of Law in the metropolis, to the letters in the Times newspaper, upon that proposal, from both branches of the profession, and to the recent report of the special committee of the University of London on the Regulations for degrees in Law.

If, however, the experience of lawyers admits the great importance for those who practise the Law to have been well grounded in the principles

of Jurisprudence, the experience of teachers equally shows the difficulty of inducing men, who look forward to practice as early as possible, to spend any time on the acquisition of those principles. And this difficulty indicates the local advantage of Cambridge as a place of scientific legal study. The school of practice must, of course, be attended at some time in a man's career: it exists only to a very small extent in Cambridge, and to the highest perfection in London. For this very reason the University town is a better site than the metropolis for that scientific reading which ought to come first. It is certain that such study cannot be practised without disturbance, and is in danger of being entirely ousted, wherever it is brought into close neighbourhood and consequent competition with the attractions of actual business. In other respects the advantages of London and Cambridge are pretty much on a par: men of equal ability will probably be attracted to the respective educational posts; and the conveniences of study offered by the University library are as good as any that can be found in the metropolis: but Cambridge has what London has not, in the leisure which is necessary for studying principles; as London, on the other hand, has what Cambridge has not, in the business which alone can teach the application of those principles to practice.

RULES AND REGULATIONS.

I. THE LAW TRIPOS.

1. THE Examination for the Law Tripos shall consist of two parts. The First Part shall consist of seven papers on the following subjects:—

Paper 1. General Jurisprudence.

Paper 2. History and General Principles of Roman Law.

Papers 3 and 4. The Institutes of Gaius and Justinian, with a selected portion of the Digest.

Paper 5. English Constitutional Law and History.

Paper 6. Public International Law.

Paper 7. Essays and Problems.

The Second Part shall consist of six papers on the following subjects:—

| | |
|--|---|
| Papers 1 and 2. The English Law of Real and Personal Property. | } With the Equitable principles applicable to these subjects. |
| Papers 3 and 4. The English Law of Contract and Tort. | |

Paper 5. English Criminal Law and Procedure, and Evidence.

Paper 6. Essays.

The order of the papers in each part of the examination shall be determined by the examiners. The problems and essays in the first part of the

examination shall have reference to the subjects set for that part. The essays in the second part shall have reference partly to the subjects of the first, partly to those of the second part.

2. The Board of Legal Studies shall from time to time publish a list of books recommended to candidates for examination, and may from time to time limit any or all of the above-mentioned subjects to a department or departments of the same; provided that public notice of such limitation shall be given in the Lent Term of the year next but one preceding that in which the examination in the subjects so limited is to take place.

3. A Student may be a candidate for honours in the first part of the examination for the Law Tripos if at the time of such examination he be in his fifth term at least, having previously kept four terms: provided that nine complete terms shall not have passed after the first of the said four terms unless the candidate shall have previously obtained honours in one of the Honours examinations of the University, in which case he may be a candidate provided that twelve complete terms shall not have passed after the first of the said four terms.

4. A Student may be a candidate for honours in the second part of the examination for the Law Tripos if at the time of such examination he be in his eighth term at least, having previously kept seven terms: provided that twelve complete terms

shall not have passed after the first of the said seven terms.

5. No Student of a different standing to that defined in the foregoing Regulations shall be allowed to be a candidate for honours in either part of the examination for the Law Tripos unless he shall have obtained permission from the Council of the Senate.

6. A Student who (*a*) obtains honours in both parts of the examination for the Law Tripos, or who (*b*) obtains honours in one part of that examination and in the same or some previous term obtains honours in any other of the Honours examinations of the University shall (provided (1) that he did not pass both of his two examinations before his eighth term of residence and (2) that he has kept the requisite number of terms at the time when he applies for his degree) be entitled to the degrees of Bachelor of Arts and Bachelor of Law and may take either or both of those degrees, and no further examination shall be required of him on proceeding to the degree of Master of Law.

7. Except as is otherwise provided by these Regulations, a Student who passes the first part of the examination for the Law Tripos shall not thereby become entitled to any degree; but a Student who shall obtain honours in such first part shall be excused the General examination for the Ordinary B.A. degree. The examiners may also declare candidates for such first part to have

acquitted themselves so as to deserve to be excused the General examination though they have not deserved honours.

8. No Student who has presented himself as a candidate for honours in either part of the examination for the Law Tripos shall again present himself as a candidate for honours in the same part of the examination.

9. The names of students who shall obtain honours in the first part of the examination for the Law Tripos shall be arranged in three classes in order of merit; and the names of students who shall obtain honours in the second part of such examination shall be arranged in three classes in order of merit.

10. The examination for the Law Tripos (first part) shall begin upon the Monday after the last Sunday but two in May, and continue for four days, the hours of attendance being on the first three days from 9 to 12 in the morning and from 1.30 to 4.30 in the afternoon, and on the fourth day from 9 to 12 in the morning.

11. The examination for the Law Tripos (second part) shall begin upon the Thursday after the last Sunday in May, and shall continue for three days, the hours of attendance being from 9 to 12 in the morning and from 1.30 to 4.30 in the afternoon.

12. If Ascension Day fall upon any of the days fixed for either part of the examination, there shall be no examination on Ascension Day,

but that part of the examination shall begin one day earlier (exclusive of Sunday) than is here provided.

13. The class lists for the first part of the Law Tripos shall be published not later than 9 A.M. on the day next before the beginning of the second part, and the class list for the second part shall be published not later than 9 A.M. on the Friday after the Second Sunday in June.

14. The examination for the Law Tripos shall be conducted by five examiners, who shall be nominated by the Board of Legal Studies and elected by Grace before the Division of Michaelmas Term in every year.

15. Each of the examiners shall receive £30 from the University Chest.

SPECIAL REGULATION FOR INDIAN CIVIL SERVICE STUDENTS.

For the purposes of the foregoing Regulations, Students who have passed the Final examination for the Civil Service of India shall be treated as though they had obtained honours in one of the Honours examinations of the University. In the class-lists the names of such Students shall, unless they present themselves for both parts of the Tripos, be distinguished by some note indicating that they are Indian Civil Service Students taking one part only of the Tripos.

REGULATIONS FOR BACHELORS AND MASTERS OF ARTS
PROCEEDING TO THE DEGREES OF BACHELOR AND
MASTER OF LAW.

1. On proceeding to the Degree of Master of Law no examination shall be required of a Bachelor of Law or of a Bachelor or Master of Arts who under the foregoing Regulations for the Law Tripos has become entitled to proceed to the degree of Bachelor of Law; but in every other case any graduate who desires to proceed to the degree of Bachelor or of Master of Law shall be required to satisfy the examiners for the Law Tripos examination in both parts, or (according to the following provisions) in one part, of that examination by attaining therein the minimum standard for Honours, and to pay the fee heretofore payable in the like case¹.

If he shall have obtained honours in any of the Honours examinations of the University other than the first part of the Law Tripos, he shall so satisfy the examiners in the first or, at his option, the second part.

If he shall have obtained honours in the first part of the Law Tripos but not in any other of the

¹ Three weeks' notice of entry for this examination should be sent by the candidate to his College Praelector, or, in the case of Non-Collegiates, to the Censor. The examination fee is £3. 3s. and should be sent, before the examination is concluded, to the Regius Professor of Civil Law, Cambridge.

Honours examinations, he shall so satisfy the examiners in the second part.

If he shall not have obtained honours in any of the Honours examinations, he shall so satisfy the examiners in both parts, and may present himself for the two parts in the same year or in different years.

2. The above Regulation as to persons proceeding to the degrees of Bachelor and Master of Law shall come into force immediately after the publication of the class list for the Law Tripos of 1889; but every person who shall at that time be entitled under the now existing Regulations to proceed to the degree of Bachelor or Master of Law without further examination shall continue to be so entitled notwithstanding these Regulations.

II. CHANCELLOR'S MEDAL FOR THE ENCOURAGEMENT OF THE STUDY OF ENGLISH LAW.

1. The prize shall be awarded, by the examiners for the Law Tripos, to the candidate who shall be most distinguished in the second part of the examination for the Law Tripos so far as the same relates to English Law. Provided that such prize shall not necessarily be awarded in each year but only in cases of exceptional merit.

2. The examination for the prize shall be open to all candidates who have presented themselves for the second part of the Law Tripos of the current year; to all Students who, having passed

the examinations entitling to admission to the title of Bachelor designate in Arts or Law, are not of sufficient standing to be created Masters of Arts or Law; to all Students who, having taken the degree of Bachelor of Arts *jure natalium*, are not of sufficient standing to be created Masters of Arts; and to all Students in Medicine of not more than seven years' standing since matriculation, who shall have passed the examinations for the degree of Bachelor of Medicine.

3. No person, who has gained the prize, shall be admitted as a candidate for it a second time.

III. GEORGE LONG PRIZE.

1. The prize shall consist of the yearly interest of the capital sum (of £500), and shall be given to that candidate for the first part of the Law Tripos who shall be most distinguished in Roman Law and Jurisprudence: provided that such prize shall not necessarily be awarded in each year, but only in cases of exceptional merit.

2. Whenever such prize shall not be awarded, the amount of the prize for that occasion shall be added to the capital sum.

IV. ADMISSION TO THE DEGREES OF BACHELOR, MASTER AND DOCTOR OF LAW.

Persons entitled under the above Regulations to the degree of Bachelor of Law, or Arts², are

² See Reg. 6 for the Law Tripos, above, p. 37.

admitted in person to the degree of Bachelor Designate after payment of the following fees:—

To their college Bursar a fee varying between £1 and £5. 9s. 6d.³; and to the Senior Proctor, for the University Chest; £7 on days of general admission⁴, £10. 10s. at other times.

The Inauguration of Bachelors designate, i.e. the perfecting of their degree, takes place without attendance or further fee at the end of the Michaelmas Term.

Persons entitled under the above Regulations to proceed to the degree of Master of Law are admitted, in person⁵, to incept in Law at the end of three years from their Inauguration as Bachelors, whether of Law or Arts (see p. 37, Reg. 6), and after payment of the following fees:—

To their College a fee varying between £2 and £9. 1s.³ To the University Chest £12.

Inceptors are created and so become complete Masters of Law, without attendance or further fee, on the Tuesday (Commencement) immediately preceding the last day of the Easter Term (June 24).

³ See table on p. 46.

⁴ Days of general admission to this degree are the Tuesday after the third Sunday in June, and the Thursday before the last day of Michaelmas term (December 19). And these are now only days of general admission for candidates who have passed the Tripos immediately preceding.

⁵ A *graduate* may be admitted to a higher degree, in his absence, by obtaining a special Grace for the purpose and paying £5 in addition to the ordinary fee.

A Master of Law may be admitted to the title of Doctor Designate at the end of five years from his creation as Master, provided he have kept an Act, to the satisfaction of the Regius Professor or his deputy, at some time after such creation. The Regulations for the Act are as follows :—

The Regius Professor of the Faculty shall assign the day and the hour when the Exercise for the degree of Doctor of Law shall be kept.

The Professor, or some graduate of the Faculty, who is a member of the Senate, deputed by him, shall preside over the exercise.

The candidate shall read a thesis composed in English by himself on some subject approved by the Professor; the Professor, or graduate presiding, shall bring forward arguments or objections in English for the candidate to answer, and shall examine him in English *viva voce* as well on questions connected with his thesis as on other subjects in the Faculty of a more general nature; the exercise being made to continue at least one hour.

Public notice of the Act shall be given by fixing on the door of the University Schools, eight days at least before the assigned time, a written paper specifying the name and College of the candidate, the day and hour appointed for the exercise, and the subject of the thesis; copies of the notice shall be delivered also, at the same time, to the Vice-Chancellor and to the Professor.

The power of proceeding to the degree of Doctor of Law under the conditions prescribed by

the 13th chapter of the Statutes published in the 12th year of Elizabeth, is also reserved to Bachelors of Law and Masters of Arts who were admitted to their degree before July 31, 1858. These conditions have become confined by custom to the keeping of a single Act, in the manner above described.

For the candidate's thesis, subjects either in English, Roman, or International Law, or in Jurisprudence, are accepted by the present Regius Professor. But a subject is preferred with which the candidate has some personal acquaintance, either from practice or special research. A copy of the thesis or the original (in the latter case to be returned to the candidate) is sent to the Regius Professor or presiding graduate a week before the Act is to be kept (see above p. 23).

The three notices above required are in practice sent to the University Marshal, New Square, Cambridge, in the following form:—

“An act for the degree of LL.D. will be kept by Mr , of College, in the Arts School, on the day of at M.

Subject:—

.”

Candidates for the degree of Doctor of Law pay a fee, on keeping their Act, of £10. 10s. to the Regius Professor or his deputy; on admission, of £20 to the University Chest (Senior Proctor), and a sum varying from £3 to £17. 10s. to their College Bursar (see table, p. 46).

The admission to the title of Doctor Designate is personal. A candidate may, after obtaining a Grace for that purpose, be admitted by proxy; but pays, in that case, £5 in addition to the ordinary University fee. Doctors Designate are created and become complete Doctors of Law, without anything further on their part, on the Commencement Tuesday after their admission as Designates.

TABLE OF COLLEGE FEES FOR LAW DEGREES.

| COLLEGES. | LL.B. | | | LL.M. | | | LL.D. | | | |
|---------------------------|-----------------|----|----|-----------------|----|----|-------|----|----|---|
| | £. | s. | d. | £. | s. | d. | £. | s. | d. | |
| St Peter's | 5 | 0 | 0 | 8 | 6 | 10 | 0 | 11 | 16 | 0 |
| Clare | 5 | 0 | 0 | 7 | 0 | 0 | | 10 | 0 | 0 |
| Pembroke | 4 | 1 | 0 | 9 | 1 | 0 | | 9 | 2 | 0 |
| Gonville and Caius | 4 | 11 | 0 | 8 | 1 | 0 | | 7 | 1 | 0 |
| ⁶ Trinity Hall | 3 | 0 | 0 | 7 | 0 | 0 | | 10 | 0 | 0 |
| Corpus Christi | 5 | 1 | 0 | 8 | 1 | 0 | | 12 | 12 | 6 |
| ⁷ King's | 4 | 0 | 0 | 8 | 0 | 0 | | 12 | 0 | 0 |
| Queens' | 5 | 9 | 6 | 7 | 9 | 6 | | 12 | 15 | 6 |
| St Catharine's | 4 | 2 | 0 | 7 | 2 | 0 | | 16 | 4 | 0 |
| Jesus | 4 | 2 | 0 | 7 | 3 | 0 | | 11 | 7 | 8 |
| Christ's | 4 | 0 | 0 | 6 | 0 | 0 | | 12 | 0 | 0 |
| St John's | 5 | 1 | 0 | 7 | 1 | 0 | | 12 | 2 | 0 |
| Magdalene | 4 | 0 | 0 | ¹⁰ 6 | 0 | 0 | | 10 | 0 | 0 |
| Trinity | 5 | 0 | 0 | 7 | 0 | 0 | | 17 | 10 | 0 |
| Emmanuel | 4 | 10 | 0 | ¹⁰ 7 | 0 | 0 | | 10 | 0 | 0 |
| Sidney | ¹¹ 4 | 0 | 0 | ¹² 5 | 0 | 0 | | 10 | 0 | 0 |
| Downing | 4 | 4 | 0 | 4 | 4 | 0 | | 8 | 8 | 0 |
| Selwyn | 2 | 0 | 0 | 3 | 0 | 0 | | 5 | 0 | 0 |
| Cavendish | 1 | 0 | 0 | 2 | 0 | 0 | | 3 | 0 | 0 |

⁶ Also a fee of £1. 1s. to the Praelector.

⁷ £1 additional to the Praelector from each person taking a degree.

⁸ Prius M.A. £1.

⁹ Prius M.A. £8. 1s.

¹⁰ Prius M.A. £3.

¹¹ Prius B.A. £2.

¹² Prius M.A. £2.

V. SPECIAL EXAMINATION IN LAW (see p. 25).

1. The examination shall take place twice in each year.

2. The first examination shall begin on the Wednesday (or, if the next day be Ascension Day, on the Tuesday) next but two before the General Admission to the B.A. Degree in the Easter Term.

3. The second examination shall begin on Nov. 29 in each year, unless that day fall on a Sunday, in which case it shall begin on Nov. 28.

4. The examination shall be conducted entirely by printed papers, and shall consist of two Parts.

5. Part I. of the examination shall be open to all students who have entered on their sixth term at least, having previously kept five terms, and have passed both parts of the Previous and of the General examination.

6. Either Part or both Parts of the examination shall be open to all students who have entered on their ninth term at least, having previously kept eight terms, and have passed both parts of the Previous and of the General examination.

7. Part I. shall consist of three papers on the following subjects:—

(1) Some branch of English Constitutional Law.

(2) Elementary parts of the English Law of Real Property.

(3) Select Cases illustrating one or both of the preceding subjects.

8. Part II. shall consist of three papers on the following subjects:—

(1) English Criminal Law.

(2) The English Law of Contract or of Tort or some branch of the English Law of Property.

(3) Select Cases illustrating one or both of the preceding subjects.

9. The third paper in each Part shall be voluntary, that is to say, students shall not be required to present themselves for it, but the results shall be taken into account in assigning the places in the Class List; and marks shall be affixed to the names of those who pass satisfactorily in either of these papers.

10. The Special Board for Law shall in every year before the end of the Easter Term publish a notice declaring more particularly what branches of Law and what Select Cases are to be the subjects of examination in the year next but one following. It shall also be the duty of the Board from time to time to recommend books in which the subjects of examination may be studied.

11. The two examinations in each year shall be conducted by the same two examiners, nominated by the Special Board for Law, and appointed by the Senate, in the preceding Lent Term, and each examiner shall receive twenty pounds from the University Chest.

12. There shall be a meeting of the examiners previous to each examination, when the papers set by each examiner shall be submitted for approval. The Special Board for Law may, if it think fit, appoint one of its members to summon and preside over this meeting, who if the votes of the examiners are equally divided shall have a casting vote.

13. One at least of the examiners and one of the Proctors or Pro-Proctors shall be present, and two of the Proctors' or Pro-Proctors' men shall be in attendance, during every part of the examination.

14. The examiners shall arrange the names of those who pass in each Part in three classes, the names in the first class being arranged in order of merit, and those in the second and third alphabetically.

15. The Class Lists shall be published in the Senate House at the latest at 10 A.M. on the Thursday before the General B.A. Admission in the Easter Term, and on the Tuesday before the General B.A. Admission in the Michaelmas Term.

16. The examiners shall send a Report of the results of each examination to the Secretary of the Board of Examinations within a week after the publication of the Class Lists, and this Report shall be communicated to the Special Board for Law.

VI. DR WHEWELL'S SCHOLARSHIPS OF INTERNATIONAL LAW.

The following are the Regulations most important to candidates.

1. There shall be eight Scholars in the University of Cambridge, to be called Dr Whewell's Scholars of International Law, of whom two at least shall be chosen every year at some time before the commencement of Michaelmas Term: provided that if in any year the Electors shall declare that there is no candidate properly qualified for any or any one of the vacant Scholarships, then such Scholarships or Scholarship shall remain vacant till the next ensuing election.

2. The Scholars shall be chosen from time to time by the Vice-Chancellor, the Master of Trinity College, the Regius Professor of Civil Law, the Professor of Moral Philosophy, the Downing Professor of the Laws of England, and the Professor of Political Economy.

3. The Election of the Scholars shall be by a majority of the Electors above mentioned: and in case of an equality of votes, the Master of Trinity College shall have a double or casting vote.

4. Four of the Scholars shall receive an annual payment of £100, and four an annual payment of £50: provided that if the clear surplus rents and other income appropriated for the endowment of Dr Whewell's Scholarships shall in any year fall short of the amount required for such payments, then for that year the payments to the said several

Scholars shall be proportionately diminished, yet so that the whole clear surplus rents and income aforesaid shall be appropriated to the said Scholars in every such year.

5. Of the two Scholars elected each year, one shall receive an annual payment of £100 or less, as the case may be, and one an annual payment of £50 or less, in like manner.

6. Each Scholar shall retain his Scholarship for four years from the 1st day of October next ensuing after his election, on condition that he keep by residence every University Term of that time, except in so far as he may have received express permission of non-residence from the Master and Seniors of Trinity College, or may hold a diplomatic or consular appointment under the Crown.

10. The Scholarships shall be open to any person under the age of twenty-five, who shall have produced satisfactory evidence to the Master and Seniors of Trinity College, that he is of good moral character: provided that no one who has once gained a Scholarship shall be allowed to be a candidate a second time.

11. Every person elected to a Scholarship, if not already a member of some College in Cambridge, shall thereupon become a member of Trinity College, and shall receive no emoluments from his Scholarship until he has commenced residence in the University.

12. Any person elected to a Scholarship, and being already a member of some other College in

the University of Cambridge, shall be entitled upon application, but shall not be compelled, to become a member of Trinity College.

13. Any Scholar shall be entitled to one set of chambers in one or other of Whewell's Courts upon application, provided that any set be vacant at the time, on condition of paying the usual rent, rates, taxes, charges for servants, &c. ; and the Master and Seniors of Trinity College shall assign at their discretion such set of chambers being vacant to any Scholar claiming this privilege : but no Scholar shall be compelled to reside in either of the said Courts, unless he be a member of Trinity College.

The Subjects of Examination have for some time been as follows :—

1. General history of International Law, with special reference to the 17th and 18th centuries.

2. Foreign relations of the principal civilised states during a specified period, to be varied from time to time.

3 and 4. Present rules of Public International Law, including the subjects of Nationality, Jurisdiction and Domicile.

5. Problems, disputed points, and proposed changes in International Law.

6. Political philosophy, including the general theory of Law and Government, and Political Economy so far as it bears upon International Law.

The Examination is generally held at the be-

ginning of June, notice of the subjects, including that of the "specified period," being given, in the Cambridge University Reporter, early in the preceding February. The number, price 3*d.*, may be had from Messrs Deighton and Bell.

VII. YORKE PRIZE.

This prize consists of the nett income, after payment of the adjudicators, arising from the investment of a capital sum of £3689. 1*s.* 7*d.*, the residue (after payment of Chancery costs) of £3989. 19*s.* 3*d.* left by the late Edmund Yorke, M.A., of St Catharine's College. The Regulations are as follows :—

1. That the prize be called the "Yorke Prize," to be awarded annually.

2. That each prize be awarded to the author, being a graduate of the University of Cambridge, of the best essay upon some subject relating to "The Law of Property, its Principles and History in various Ages and Countries." Such graduate shall not be of more than seven years' standing from admission to his first degree at the time when the exercises are directed to be sent in.

3. That the subject for each essay be selected and the prize adjudged by two or more Judges or Adjudicators selected and appointed by the Vice-Chancellor, the Master of Trinity College, and the Master of Magdalene College, and approved by Grace of the Senate.

4. That the subject for each essay be announced and published before the end of November in each year, and that the exercises be sent in before the first of December of the year next but one succeeding. That they be sent to the Vice-Chancellor in the same manner and form as are prescribed by the Regulations for the Chancellor's English Medal, and that the prize be awarded before the first of February following.

5. That each Adjudicator shall receive five pounds out of the income of the Fund.

6. That the Public Orator or one of the Professors or Public Functionaries of the University, who shall be able and willing to act, shall be invited by the Vice-Chancellor, the Master of Trinity College, and the Master of Magdalene College to act as Adjudicator in the event of such difference of opinion between the paid Adjudicators as shall prevent them from adjudging the prize, and that his decision in the case of any reference to him shall be conclusive.

7. That the successful competitor for every prize essay shall print and publish the essay at his own expense in such manner and within such period as the Vice-Chancellor and the Masters of Trinity and Magdalene Colleges shall from time to time direct, and that a copy thereof shall be sent to the University Library and to each of the Adjudicators.

8. That out of the income of the trust funds accrued due since the last previous adjudication of the prize the Adjudicators shall receive the amount

payable to them, and that the residue of such income shall be paid to the successful competitor.

9. That if on any occasion the Adjudicators shall be of opinion that no essay sent in is deserving of a prize the amount of the prize for that occasion shall be invested in the purchase of £3 per cent. Consolidated Annuities to be added to the capital trust fund.

VIII. CONSOLIDATED REGULATIONS OF THE INNS OF COURT.

The following are the Regulations referred to on pages 25 and 30.

28. The subjects for instruction shall be—

1. Roman Law and Jurisprudence and International Law, Public and Private (Conflict of Laws).
2. Constitutional Law (English and Colonial) and Legal History.
3. English Law and Equity, viz. :—

(a) Law of Persons, including :—

Marriage and Divorce. Infancy. Lunacy. Corporations.

(b) Law of Real and Personal Property and Conveyancing, including :—

Trusts; Mortgages. Administration of Assets on Death; on Dissolution of Partnerships; on Winding-up of Companies, and in Bankruptcy. Practical instruction in the preparation of Deeds, Wills, and Contracts.

(c) Law of Obligations.

Contracts. Torts. Allied Subjects (implied or quasi contracts), estoppel, &c. Commercial Law, with especial reference to Mercantile Documents in daily use, which should be shown and explained.

(d) Civil Procedure, including evidence.

(e) Criminal Law and Procedure.

41. There shall be four examinations for Calls to the Bar in each year—one before each Term, and in sufficient time to enable the requisite Certificates to be granted by the Council before the first day of each Term.

42. An Examination in Roman Law and in such of the Heads of the English Law and Equity mentioned in Rule 28 (3), as the Council shall from time to time determine, shall be obligatory for Call to the Bar.

43. No Student, except such as come under Rule 14¹³, shall be examined for Call to the Bar until he shall have kept nine Terms; but Students shall have the option of passing the Examination in Roman Law, required by Rule 42, at any time after having kept four Terms.

44. The Council may accept as an equivalent for the Examination in Roman Law—

- i. A Degree granted by any University within the British Dominions, for which the qualifying Examination included Roman Law;
- ii. A Certificate that any Student has passed any such Examination, though he may not have

¹³ Previously a Solicitor in practice.

taken the Degree for which such Examination qualifies him ; and

- iii. The Testamur of the Public Examiners for the Degree of Civil Law at Oxford that the Student has passed the necessary Examination for the Degree of Bachelor of Civil Law ;

Provided the Council is satisfied that the Student, before he obtained his Degree, or obtained such Certificate or Testamur, passed a sufficient Examination in Roman Law.

46. Examination for Call to the Bar shall be by written papers, and by such *vivâ voce* questions (if any) as the Examiners may think desirable.

50. The Council shall grant Certificates of Honour to such persons as may be reported worthy of the same by the Examiners.

51. Two Studentships of one Hundred Guineas per annum each, tenable for three years, shall in each year be given to the Students who shall pass the best Examination on the whole in all the subjects mentioned in Regulation 28. But the Council shall not be obliged to recommend any Studentship to be awarded if the result of the Examination be such as, in their opinion, not to justify such recommendation. Where any Candidates appear to be equal or nearly equal in merit, the Council may, if they think fit, divide the Studentship between them equally or in such proportions as they consider just.

52. Only Members of an Inn not called to the Bar shall compete for a Studentship.

53. No person who has gained one Studentship shall hold another.

55. There shall be two Honour Examinations in each year, conducted by a Board of Examiners appointed by the Council, at each of which one Studentship and Certificates of Honour, and Pass Certificates enabling the holders to be called to the Bar without further Examination, may be awarded.

56. At every Call to the Bar those Students who have obtained Studentships shall take rank in seniority over all other Students called on the same day, and those Students who have obtained Certificates of Honour shall take rank immediately after the holder of a Studentship called on the same day.

57. The Inn of Court, to which the holder of any Studentship or of a Certificate of Honour belongs, may, if desired, dispense with any Terms not exceeding two that may remain to be kept by such Student previously to his being called to the Bar.

59. Previous to each Examination the Committee or Board shall give such notice as they shall think fit of the Books and branches of subjects in which Students will be required to pass at such Examination in order to be entitled to a Certificate.

The candidates for examination in the Law Tripos who intend to avail themselves of the exemption provided for in Regulation 44 should apply for certificates, as soon as possible after

publication of the Tripos lists, by letter addressed to "the Regius Professor of Civil Law, Cambridge."

There will, however, it is hoped, always be a certain number of Cambridge Students who seek for honours or emolument rather than exemption from the Bar examinations. Such candidates will derive a very material advantage from the identity of a large proportion among the subjects with those which they have previously studied for the Law Tripos.

Candidates for admission as **Solicitors** do not appear to derive any advantage, in the way of exemption, from the special study of Law at the University. The Preliminary examination is excused to all who have passed the Previous examination at Cambridge, and two years of service (as Articled Clerk) to all graduates of Universities: those who have merely passed the Previous examination at Cambridge, without proceeding to a degree, have one year of service excused. Substantial advantage, however, in the Intermediate and Final examinations, will, no doubt, be enjoyed by those who have applied themselves especially to the study of English Law at Cambridge. Upon the subject of the admission of Solicitors, reference may be made to the Summary of Regulations published by the Incorporated Law Society, Chancery Lane.

In the particular point on which I venture to think that an alteration of these Regulations might be desirable—viz. exemption of candidates, who have passed such an examination as the Cambridge Tripos, from the London Intermediate examination

—the consent of Parliament would, I believe, be required. Should steps be ever taken in this direction, I would submit the following considerations in favour of the change.

1. The books recommended by the Cambridge Law Board do now include, and are almost certain always to include, the elementary works on the Laws of England appointed by the London examination Committee.

2. The papers set in the Law Tripos are now, and are likely always to be, a more severe test than the Intermediate examination.

3. In the case of idle men the stimulus of recurring examinations is perhaps desirable; but the candidates under consideration are presumably not idle men; they have already studied, and been examined in, the subjects of the Intermediate examination; and it may surely be questioned whether the time which must be devoted to special preparation (even though the candidate has passed in the same subjects before), might not be better spent in practical work or in preparing for the Final.

4. The exemption suggested would probably attract to the University a larger number of persons intending to practise as Solicitors, and induce a larger number of University students so intending to devote themselves specially to the study of Law at Cambridge.

DEGREES IN MEDICINE AND SURGERY.

A *Qualification to practise* in Medicine or Surgery may be conferred by the licence or diploma of a College of Physicians or of Surgeons; but a *degree* can be obtained only at a University. A Cambridge degree in Medicine or in Surgery, when registered in accordance with the Medical Act, is a legal qualification to practise, and gives the right to practise in every branch of the profession in any part of the United Kingdom.

DEGREES IN MEDICINE—Bachelor and Doctor—have long been given in the University. The degree of Bachelor of Medicine confers in the University many of the privileges of the M.A. degree, but not a vote in the Senate. This last and certain other privileges are acquired with the Doctor's degree. The title of "Doctor" is often, by courtesy, accorded to a Bachelor of Medicine, but, by right, belongs only to one who has taken the degree of Doctor.

DEGREES IN SURGERY. Under its Elizabethan Statutes the University had the power of granting a Licence to practise Surgery. Under the recent statutes it grants the degrees of Bachelor of Surgery and Master of Surgery; and the holders of these degrees rank with Bachelors of Arts and Masters of Arts respectively.

THE FOLLOWING IS AN ABSTRACT OF THE REGULATIONS FOR THE DEGREES OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY.

A STUDENT proceeding to either or both of these degrees must

1. Reside in the University three-fourths of each of nine terms, either as a collegiate or as a non-collegiate student¹.
2. Pass the "Previous Examination"² or present

¹ The expenses attendant on residence as a non-collegiate student are rather less than those of residence in College; and the tutorial and other fees are also less.

Information respecting the regulations for non-collegiate students may be obtained from the Censor, Fitzwilliam Hall, Cambridge.

Cavendish College has recently been founded to enable students to come to the University at an earlier age than has been usual, and also to reside and graduate at less cost. Information respecting it may be obtained by writing to the Master, J. H. Flather, Esq., at the College. Selwyn College is for a similar purpose; the students of it must be members of the Church of England.

² This Examination consists of two Parts and Additional Subjects. PART I. one of the four Gospels in Greek; one of the Latin Classics; one of the Greek Classics, + Latin and Greek Grammar, translation of Latin passages.—PART II. Paley's Evidences or Elementary Logic; Euclid, Books I. II. III., Definitions 1—10 of Book V., Props. 1—19 and A of Book VI.; Arithmetic; Elementary Algebra. These must be passed by all Candidates for degrees. The ADDITIONAL SUBJECTS are (1) Mechanics, (2) French, (3) German. An Examination in one of these subjects must be passed, as well as Parts I. and II., by Candidates for the Honour Triposes. The

the certificates from the Local Examination, the Higher Local Examination, or the Oxford and Cambridge Schools Board Examination, which are accepted in lieu of the Previous Examination.

3. Pursue medical study for five years¹.

There are three EXAMINATIONS conducted partly by written questions, partly oral, and partly practical. They include chemical analysis, biology, practical histology, the recognition and description of specimens (healthy and morbid), dissections, and the examination of patients.

Examination is in June, October and December; and the particular Gospel and the Classical Subjects are made known in the Easter Term of the preceding year.

This Examination may be passed in the first or any later term of residence. It should be passed as early as possible. The Candidate may then, at once, be registered as a medical student and commence his medical studies in the University.

It is however by far the best plan to pass, before coming up to the University, one of the Examinations, the certificates of which give an exemption from the Previous Examination. The student then begins his Scientific and Medical Studies as soon as he comes up in October. He thus not only gains time, but he has the advantage of joining the courses of lectures at their commencement. The Local Examinations are held in various towns in December; and the Higher Local Examinations in June. Information respecting them may be obtained by writing to the Secretary, Syndicate Buildings, Mill Lane, Cambridge. The Oxford and Cambridge Schools Board Examinations are held in June, July, and December. Information respecting them will be found in the Regulations of the Board, which may be obtained from booksellers, or by writing to E. J. Gross, Esq., Caius College, Cambridge.

¹ This he may do in the University or elsewhere. Commonly the first part of the time is spent in the University and the remainder at some Metropolitan or other recognised Hospital or School of Medicine. As evidence of Medical Study in the University the Student must produce certificates of diligent attendance in each term on Courses of Lectures, or Practical Instruction, in some two of the subjects of the Examinations for Medical or Surgical degrees: *or* of diligent attendance in each term on a course of Lectures, or Practical Instruction, in one of those subjects, and *also* on the Practice of Addenbrooke's Hospital. Certificates of attendance on Lectures or Practical Instruction may be given either by a Professor of the University, or by a Teacher approved by the Senate, provided the course has been approved by the Special Board of Medicine.

The subjects of the First Examination for M.B. and B.C.¹ are—

1. Chemistry and other branches of Physics,
2. Elementary Biology.

The two parts may be taken together or separately. The fee for either part of the Examination is two guineas.

The candidate may present himself for either part or both parts of this Examination at any time after passing the Previous Examination. Before admission to Part I. (Chemistry etc.) he must produce certificates of diligent attendance on a course of Lectures on Chemistry and of Practical Instruction in Chemical Manipulations.

The subjects of the Second Examination for M.B. and B.C. are—

1. Pharmaceutical Chemistry,
2. Human Anatomy and Physiology.

The two parts may be taken together or separately. The fee for either part of the Examination is two guineas.

Before presenting himself for Part II. (Human Anatomy and Physiology) the Candidate must have attended Hospital Practice during six months, have practised dissection during six months, and have diligently attended a course of Lectures on Human Anatomy and a course of Lectures on Physiology.

The subjects of the Third Examination for M.B. and B.C. are—

1. Pathology,
2. Principles and Practice of Surgery,
3. Midwifery and diseases peculiar to women,
4. Principles and Practice of Physic,
5. Elements of Hygiene,
6. Medical Jurisprudence.

¹ See Schedules at the end of this Article.

This Examination is divided into two parts which may be taken together or separately ; one including the Principles and Practice of Surgery and Midwifery, the other Pathology, Principles and Practice of Physic, the Elements of Hygiene, and Medical Jurisprudence.

Before presenting himself for the first part of the Examination (Surgery and Midwifery) the Candidate must produce certificates of diligent attendance at a course of Lectures on Pathology, a course on the Principles and Practice of Surgery, a course on Midwifery, and a course of instruction in Practical Surgery ; also of having acted as Dresser or House-Surgeon at a recognised Hospital for six months, and of having attended twenty cases of Midwifery ; and he must produce a certificate of proficiency in Vaccination from one of the authorities recognised by the Local Government Board.

Before presenting himself for the second part of the Examination, the Candidate must have completed the course of medical study, have attended the Medical and Surgical Practice of a recognised Hospital (with clinical lectures) during three years, and must produce certificates of having attended one Course of Lectures on each of the following subjects :—

The Physiological and Therapeutical action of remedies,

Principles and Practice of Physic,

Medical Jurisprudence ;

and also a certificate of having been Clinical Clerk for six months at least at a recognised Hospital ; or of having, subsequently to the completion of his attendance on Hospital Practice, attended to Practical Medicine or Surgery, with special charge of patients, in a Hospital, Dispensary, or Parochial Union, under the superintendence of a qualified Practitioner, unless he himself be duly qualified.

The fee for either part of the Examination is two guineas.

After these Examinations have been passed, before proceeding to the degree of M.B. (the Act is not required for the degree of Bachelor of Surgery), an Act must be kept in the Schools in the following manner:

The Professor of Physic assigns the day and hour for keeping the Act, of which public notice has to be given eight days before. The Candidate reads a thesis, composed in English by himself, on some subject approved by the Professor; the Professor brings forward arguments or objections for the Candidate to answer, and examines him *vivâ voce* as well on questions connected with his thesis as on other subjects in the faculty of a more general nature. The exercise must continue at least one hour.

THE DEGREE OF DOCTOR OF MEDICINE

may be taken by a Bachelor of Medicine in the ninth term after his inauguration (this occurs on the Commencement Day next following the admission to the degree). He is required to keep an Act in similar manner to that for M.B., and to write a short extempore essay on some one (at his choice) of four topics relating severally to Physiology, Pathology, Practice of Medicine, and State Medicine, which are submitted to him. He is further examined *vivâ voce* in the subject of his thesis and on the essay above mentioned.

A Master of Arts may proceed to the degree of M.D. in the twelfth term after his inauguration as M.A. without having taken the degree of M.B. He must pass the three Examinations for M.B., and keep the Act for the M.D. degree. He must produce certificates of having been engaged five years in medical study, and the same certificates of attendance on Lectures and on Hospital practice as are required of the candidate for the degree of M.B.

THE DEGREE OF MASTER IN SURGERY.

The subjects of the Examination for this degree are—

Surgical Anatomy,
 Pathology, Principles and Practice of Surgery,
 Surgical Operations,
 Examination of patients.

A Surgical case and a topic relating to Surgery are submitted in writing to the Candidate, on one or both of which, at his option, he is required to write a short extempore essay.

The Candidate is required to have completed all that is required of Candidates for the degree of Bachelor of Surgery, and two years must have elapsed from the period of that completion.

The Examinations for Medical and Surgical degrees take place twice annually, at the end of the Michaelmas term and in the early part of the Easter Term. Notices are published stating the dates when Candidates are required to send notice of their intention to offer themselves for examination. The names of the Candidates must be sent to the Registry of the University by the Tutors of the respective Colleges and Public Hostels, or the Censor of the Non-Collegiate Students Board ten days before the commencement of the respective Examinations; and the required certificates must be sent to the Registry not later than the fifth day before the commencement of the Examinations.

On the Student's commencing medical study in accordance with the requirements of the University, a Certificate to that effect in the form prescribed by the Medical Council¹,

¹ It should be observed that Professional study at one of the recognised Schools or Hospitals may have commenced before entrance at the University, and will be taken into account provided the student was registered in accordance with the requirements of the General Medical Council.

and signed by one of the Professors or Teachers, should be sent to the Registrar of the Medical Council, 299, Oxford Street, London, within 15 days of the commencement of the Medical Courses.

The form for Registration above mentioned, the schedules defining the range of subjects in the Examinations, forms for the requisite certificates, a list of the Schools of Medicine recognised by the University, and other papers may be obtained, on application, from the attendant at the Anatomical School or from the Assistant-Registrary, Cambridge.

The Examinations passed and the Acts kept, the student may be at once admitted to the degrees. The fee for M.B., B.C. or M.C. is £8 to the University (in the case of a B.A. £2), and a sum to the College varying from £4 to £16; for M.D. £20 to the University, and a sum varying from £6 to £17. 10s. to the College.

It will be seen from the preceding regulations that the candidate for Medical and Surgical degrees need not necessarily graduate in Arts. He is required only to pass the Previous Examination, and may devote all his time in the University after passing that Examination to the study of Medicine; and after passing the three Medical Examinations and keeping the Act he may be admitted to the degrees.

This however is rarely done. By far the greater number graduate in Arts as well as in Medicine; and they do so for the most part

through the Natural Sciences Tripos, the subjects (but not the papers) of the Examination for that Tripos or some of them (Chemistry, Botany, Comparative Anatomy, Human Anatomy, and Physiology) being also subjects of the Medical Examinations, so that the student can be preparing for the Medical Examinations and the Examinations for the Natural Sciences Tripos at the same time. He may pursue the following plan. Provided he has, before commencing his University course, obtained the certificates from the Local, Higher Local, or Oxford and Cambridge Schools Board Examinations, which exempt him from the Previous Examination, or in the event of his passing the two parts of the Previous Examination with the Additional Subjects at the beginning of his first term, he may devote himself, at once on coming up (say in Oct. 1891), to Physics, Chemistry and Biology, and continue to do so till June (1892) at which time he may pass the First Examination for M.B. in these subjects. During the subsequent vacations and terms, including the long vacation (1892) immediately ensuing upon the first M.B. Examination, he may devote himself to Human Anatomy, to Comparative Anatomy and to Physiology, and, towards the end of his third year (1894), he may pass the first part of the Examination for the Natural Sciences Tripos and be admitted to the B.A. degree, and may also pass the Second Examination for M.B. During this time he will have been attending the practice of Addenbrooke's Hospital six

months or a year (say from June 1892); and after the Second Examination for M.B. he can remain for a period in Cambridge serving as Clinical Clerk or Dresser, also attending the Lectures on Pathology, Medicine, Surgery and Midwifery, or he can leave Cambridge and study these subjects in some other school.

Although, as just said, the subjects for the First and Second Examinations for M.B. are subjects of the Examination for the Natural Sciences Tripos and the preparation for the latter may be carried on concurrently with that for the former, yet it should be remarked that the character of the questions differs somewhat in the two Examinations, a rather wider range being taken in that for the Tripos than in that for M.B. The student must bear this in mind in his preparation for the two; and by doing so and passing both he will acquire a more thorough knowledge of the subjects than he would have done if he had presented himself for the Medical Examinations only.

To pass these Examinations in the period specified it need scarcely be said that the student must make good use of his time and must not be below the average in ability and application. But any one who, before coming up, has obtained the certificates requisite to exempt him from the Previous Examination, including the Additional Subjects, will not find much difficulty. It may even be accomplished by a student who passes the Previous Examination in his first term of residence.

If the student aims at a higher scientific knowledge of these subjects or any of them and aspires to greater distinction in the Tripos, he can go in for the second part of the Natural Sciences Tripos in the same term (June 1894), or, if he can afford another year, in the subsequent June (1895). In the case however of his having decided to go in for the *second* part of this Examination he will do wisely to take an earlier opportunity (June 1893) of passing the *first* part.

Some, who can command the time, pursue more fully the study of certain of the Natural Science subjects—Physics, Chemistry or other—and postpone the preparation for the Second Examination for M.B. to a later period.

Some again proceed to the B.A. degree through one of the other Triposes—Classical, Mathematical, etc.—and do not commence Medical or Natural Science study till that has been done.

Again some, who may not have passed in the Additional Subjects of the Previous Examination, which is required of all Candidates for a Tripos, proceed to the B.A. degree through the General and Special Examinations and pursue Medical study more or less during the course for the Ordinary B.A. Degree. The combination however of General and Medical studies, which this to some extent involves, is not to be recommended.

Of these modes of proceeding the one first described is likely to find most favour and is most suitable to the great number of students, who desire

to obtain the University degrees and the qualification to practise with the least expenditure of time and money.

Briefly restated it is as follows :—

Entrance Oct. (1891), the student bringing, if possible, certificates exempting him from the Previous Examination ; if not, he should pass that Examination in his first Term (Oct. or Dec. 1891).

First Examination for M.B. June (1892).

Examination for Natural Sciences Tripos—
First Part—and Second Examination for
M.B. at the end of the third year (June 1894).

B.A. degree (June 1894).

Third Examination for M.B. two years from the
Second (June 1896); one part of this may have
been passed at an earlier period (Dec. 1895).

M.B. and B.C. degrees (June 1896).

This allows five years for obtaining the B.A. and M.B. degrees, which is the minimum period possible, except in the case of those who have made some progress in Medical study and been registered as Medical students before they come to the University.

Whichever of the courses thus indicated the Candidate may take, he will find it the best as well as the cheapest plan to remain in Cambridge till he has passed the Second Examination for M.B. The opportunities for preparing for that Examina-

tion in Human Anatomy and Physiology, afforded by the Dissecting rooms, the Museums, and the Physiological Laboratory, in Cambridge, are as good as are elsewhere to be found. In some respects they are better; and Addenbrooke's Hospital, where clinical lectures are regularly given and clinical instruction is carefully carried out, will furnish quite sufficient means for the initiatory study of disease. After he has passed the Second Examination for M.B. the student may still remain in Cambridge for a time with advantage, and subsequently he will do best to resort to some metropolitan school where there is a wider field of Hospital practice and larger instruction in Medicine, Surgery, and Midwifery.

Between seventeen and eighteen is a good age for those who are intended for the Medical profession to come to the University. The real test however is the fitness to pass the Previous Examination, or, still better, the Examinations already mentioned whereby exemption from the Previous Examination may be obtained. It may be stated, as a general rule, that the student who can pass these Examinations is fit to come to Cambridge, and that he who cannot do so is not fit. Unless this rule is followed disappointment and dissatisfaction are likely to be experienced. One who comes at seventeen or eighteen may, if he is intelligent and diligent, obtain the B.A., M.B., and B.C. degrees and be qualified to practise at twenty-two or twenty-three. Until the study of Medicine is actually

commenced, no *special* training is required or even to be advised. The best training is the same good general education which experience shews to be the most suitable preparation for the other professions. To what extent this should be continued in the University must depend upon the tastes or pecuniary resources, or the prospects of University distinction and of the acquisition of a Scholarship or a Fellowship, in each particular case. If there is no special reason of this or other kind for delay, it is best to begin Medical study (the various collateral Sciences are included in this phrase) as soon as the regulations permit, that is, after the Previous Examination. When it is begun the whole time and attention should be given to it. An extensive and difficult science is entered upon, and it must be worked at, like any other science, with observation, with reading, and with reflection. It must not be regarded too much as a practical matter in which reading is superfluous, still less as a science to be mastered by reading only; and, above all, it is important for the student to reflect well on what he sees and hears and reads, to learn to judge for himself, and to test the statements of others by his own observation and reason. Each of the Sciences included in Medical study has become so extensive that it is impossible to do more than obtain a good elementary knowledge of them all. The student will naturally choose some to which he will give more especial attention, and may thus be preserved from the tendency to cram and superficial know-

ledge, which the necessity of getting up so many subjects is likely to induce. Those which are of greatest importance to the Medical man are Anatomy and Physiology, Pathology, and Practical Medicine and Surgery. For a good knowledge of these, diligent work in the dissecting-room, in the pathological museum and the mortuary, and in the hospital, is necessary to be combined with reading and attendance on Lectures. Too many subjects should not be attempted at one time; if they are, the impressions in each are likely to be imperfect, confused, and evanescent. The serial division of the subjects and the order of studying them given by the three Examinations furnish a good guide, and the Candidate will do well to follow it.

First. What may be called the preliminary or collateral subjects—Physics, Chemistry, and Biology. *Next.* Anatomy and Physiology with Pharmacy and Hospital Practice. *Thirdly.* Pathology, Surgery, Medicine, and Midwifery.

With regard to Hospital Practice it is, as a general rule, best to attend either the Medical or the Surgical Practice, and not to attempt both at the same time. To profit properly by it requires not a lounging, gossiping and occasional attendance, but regularity and intentness, so that the habit is acquired of marking and duly estimating every symptom and every feature of the patient; and the observing student will soon learn that the manner of the Physician or Surgeon and the questions which he puts in investigating the several

cases form the best and most practical clinical lectures which he ever gives. The seeing patients and the familiarising the perceptive and the reflective faculties with the features of disease can scarcely be commenced too early or continued too long. It may be commenced with advantage even before regular medical study is entered upon ; and the impressions of cases seen at that period, when the mind is free and fresh, are very enduring, and often, in diligent and observing youths, form the foundations upon which great practical skill is based. An interval between school and the period of regular medical study may sometimes be thus well employed by living in the house, or reading under the guidance, of some intelligent medical man and attending the practice of a Dispensary, Union, or Hospital. But when the regular and serious study of Medicine, or rather of its collaterals, Chemistry, Anatomy, &c., have been definitely entered upon at a medical school, the mind is not, or ought not to be, sufficiently free to derive much benefit from Hospital Practice ; and the imperfect manner in which it is then, almost of necessity, attended under such circumstances is likely to do harm by engendering a loose, careless, desultory habit in that very work upon which the powers of observation and thought require to be in the highest degree concentrated. It is far better to allow the attention to be occupied and the mind seasoned with the preliminary or collateral subjects, till some progress has been made in them, before

entering upon Hospital Practice. Chemistry, Anatomy, &c. will thus be much better and more quickly learned; and having some knowledge of them, the student will enter with greater advantage upon Hospital Practice.

The opportunities for clinical study in Addenbrooke's Hospital are very good, as good as in the metropolitan Hospitals, for the commencement of Medical education. The times of attendance of the Physicians and Surgeons are arranged so as to suit the convenience of the students as much as possible. Clinical Lectures are regularly given, and much attention is paid to clinical instruction. It should be added that Clinical Clerkships and Dresserships are given by the Physicians and Surgeons without extra fee.

The courses of instruction in Anatomy and Physiology given in the University extend from the beginning of the Michaelmas Term to the end of the Easter Term, with a short intermission at Christmas. They are resumed in July and August. The Dissecting Rooms, the Chemical, Physiological, and Pathological Laboratories are open almost throughout the year; and the study of the various subjects should not be confined to the terms, but should be continued, more or less, through the vacations. Hospital Practice, for instance, may be attended, and Anatomy worked at, by dissection and otherwise, in the vacations as well as in the terms; and the student is strongly advised to remain up during parts of the vacations for this purpose.

The books to be recommended are Remsen's *Elementary Organic Chemistry and Inorganic Chemistry*; Garnett's *Heat*; Blakey's *Mechanics*; Silvanus Thompson's *Electricity*; Huxley and Martin's *Biology*; Marshall and Hurst's *Zoology*; Macalister's *Anatomy*; Gray's *Anatomy*; Quain's *Anatomy*; Humphry's *Human Skeleton*; Foster's *Physiology*;—Walsham's *Theory and Practice of Surgery*; Treves' *Manual of Surgery*, Bryant's *Practice of Surgery*; or Holmes' or Erichsen's *Surgery*; also a "set of bones necessary for a student," and a disarticulated skull, which may be purchased of the attendant at the Schools. Fenwick's *Guide to Medical Diagnosis*, Druitt's *Surgeon's Vade Mecum, &c.*, and Green's or Zeigler's *Pathology* will be found useful during attendance on Hospital Practice. Watson's *Lectures on the Practice of Medicine*, Aitkin's *Medicine* and Cooper's *Surgical Dictionary*, lately edited by Lee, or Holmes' *System of Surgery*, are good works of reference, and will be convenient for that purpose.

SCHEDULES DEFINING THE RANGE OF EXAMINATIONS.

ISSUED BY THE SPECIAL BOARD FOR MEDICINE.

(Issued Feb., 1891.)

CHEMISTRY.

The questions on Chemistry will have reference to

The essential features of chemical change; the laws of chemical combination; interpretation of chemical formulæ;

diffusion of gases and of liquids; explanation and illustration of atomic weight, molecular weight, equivalency, acid, base, salt, oxidation, reduction, allotropy, isomerism, polymerism, compound radicle, homologous series.

Questions will be set requiring the explanation and illustration of the foregoing subjects by reference to the methods of preparation, properties, and classification, of the following elements and compounds: hydrogen, oxygen, nitrogen, chlorine, bromine, iodine, sulphur, carbon, phosphorus, arsenic, antimony, bismuth, sodium, potassium, calcium; magnesium, aluminium, iron, manganese, zinc, mercury, copper, silver, lead, and tin; the commoner oxides and hydroxides of these elements; silica; the compounds of hydrogen with chlorine, bromine, iodine, sulphur, nitrogen, arsenic, and antimony; the salts which the foregoing metals form with the acids hydrochloric, nitric, carbonic, and sulphuric; and the ortho-phosphates of sodium, calcium, magnesium, and iron.

Questions will also be set on the preparation, properties, and relations, of the following compounds of carbon: methane and its chlorinated derivatives, ethylene, benzene; methylic and ethylic alcohol, glycerin; phenol; acetic aldehyde, chloral; ethylic ether; formic, acetic, palmitic, stearic, oxalic, lactic, tartaric, benzoic, and salicylic acid, and the ethylic salts of acetic, palmitic, and stearic acid; hydrocyanic acid, simple cyanides, and ferrocyanides; ethylamine, aniline, urea; cane and grape sugar.

The examination in Practical Chemistry will include the preparation, and performance of experiments illustrating the properties, of hydrochloric, nitric, and oxalic acid; ammonia and caustic soda; the oxides, hydroxides, chlorides, sulphides, nitrates, and sulphates, of calcium, magnesium, iron, copper, mercury, lead, and tin. Easy qualitative analysis of inorganic substances. Quantitative estimation of alkalis, alkaline carbonates, and acids, by neutralisation; also of salts of iron in solution. Standardised solutions will be provided.

PHYSICS.

The subject in Physics will be treated from an experimental point of view, and the questions will have reference to

I. The fundamental notions of velocity and acceleration; composition of two velocities or accelerations; Newton's laws of motion; definitions of force, work, and energy. The elementary parts of the Mechanics of solid and fluid bodies: namely, the characteristic physical properties of matter in its solid, liquid, and gaseous forms; the composition and resolution of two forces acting on a body in one plane; weight, centre of gravity, density, and specific gravity; the mechanical powers and their properties; falling bodies; the pressure of liquids and gases; floating bodies; the siphon; pumps.

II. The elementary parts of Optics: namely, the laws of the propagation, reflexion, and refraction of light; the formation of images by single reflectors and single lenses; the combination of two lenses to form a microscope or telescope; the phenomena of dispersion by a prism; the optical structure of the eye; the use of spectacles.

III. The elements of Heat: namely, definition of temperature, measure of temperature, the structure of common thermometers, and the comparison of thermometric scales. Coefficient of expansion; expansion of water; expansion of gases; pressure of aqueous vapour; the dew-point. Measure of quantity of heat, specific heat, latent heat. Conduction, convection; radiation; reflexion and absorption of radiant heat. Relation of heat and work.

IV. The elements of Electricity: namely, the development of electricity by friction; conductors and insulators; attraction and repulsion of electrified bodies; electroscopes. Electromotive force and potential. The laws of static induction; the Leyden jar. The simple galvanic cell; the phenomena of current in conductors; Ohm's law; laws of

electrolysis. The simple phenomena of magnetism and of magnetic induction; electro-magnets, influence of an electric current on a magnetic needle; laws of electro-magnetic induction; the structure of a simple dynamo machine. Construction and use of certain simple machines for generating electricity: namely, the plate electric machine, the electrophorus; the Daniell, Grove, Bunsen, Leclanché, and bichromate batteries; the induction-coil.

In any of the four sections above defined, simple calculations or questions depending directly upon the facts or laws specified may be proposed.

ELEMENTARY BIOLOGY.

(Issued Nov. 20, 1883.)

The questions in Elementary Biology will have reference to

(1) The fundamental facts and laws of the morphology, histology, physiology, and life-history of plants, as illustrated by the following types: *Saccharomyces*, *Protococcus*, *Mucor*, *Spirogyra*, *Chara* or *Nitella*, a Fern, *Pinus*, and an angiospermous flowering plant.

(2) The fundamental facts and laws of animal morphology, as illustrated by the following types: *Amoeba*, *Paramecium* or *Vorticella*, *Hydra*, *Lumbricus*, *Astacus*, *Anodon*, *Amphioxus*, *Scyllium*, *Rana*, *Lepus*.

Under the head of vegetable physiology the Student will not be expected to deal with special questions relating to the more highly differentiated flowering plants.

He will be expected to shew a practical knowledge of the general structure of each of the animal types above specified, and an elementary knowledge of the chief biological laws which the structural phenomena illustrate. He will also be expected to shew an elementary knowledge of the general developmental history of *Amphioxus* and of *Rana*. He will not be expected to deal with purely physiological details.

PHARMACEUTICAL CHEMISTRY.

The examination will be practical, and will have reference to the chemical principles involved in—the preparation of Fowler's Solution (*Liquor arsenicalis*) and the Hydrochloric Solution of Arsenic (*Liquor arsenici hydrochloricus*), and the reactions of these solutions with ferric salts; the preparation from ferrous sulphate of Phosphate of Iron (*Ferri phosphas*) and the Solution of Ferric Sulphate (*Liquor ferri persulphatis*); the preparation from ferric oxide of Reduced Iron (*Ferrum redactum*); the preparation of Iodide of Potassium (*Potassii iodidum*), and the action of dilute acids, ferric salts, and other oxidising agents, upon it; the reactions of Sulphide of Calcium (*Calx sulphurata*) with acids and with salts of copper and lead; the detection of oxide of mercury in Mercury with Chalk (*Hydrargyrum cum creta*); the preparation by sublimation of Corrosive Sublimate (*Hydrargyri perchloridum*) and Calomel (*Hydrargyri subchloridum*), and the detection by means of ether of the former salt in impure calomel; the action of alkaline solutions on corrosive sublimate and calomel respectively; the action of Solution of Ammonia (*Liquor ammoniae*) on corrosive sublimate to form Ammoniated Mercury (*Hydrargyrum ammoniatum*), and the chief reactions of this compound; the reaction of Chloride of Antimony (*Liquor antimonii chloridi*) with water, the preparation from Oxide of Antimony (*Antimonii oxidum*), of Tartar Emetic (*Antimonium tartaratum*), and its principal reactions; the reaction of bismuth nitrate with water to form Subnitrate of Bismuth (*Bismuthi subnitras*), and the reactions of the salt with water and with ammonia in the presence of citric acid; the action of alkalis on Hydrate of Chloral (*Chloral hydras*); the preparation of Iodoform (*Iodoformum*); the preparation from ferrocyanide of potassium of Diluted Hydrocyanic Acid (*Acidum hydrocyanicum dilutum*), its formation from bitter almonds, and the production from it

of Prussian blue; the reactions of the tannins of Galls (*Gallae*), of Rhatany (*Krameriae radix*), and of Catechu, with gelatine, lead acetate, ferric Salts, and tartar emetic; the chief reactions and the detection of salicin, salicylic acid, and carbolic acid; the detection of any one of the following alkaloids in a mixture of it with other organic substances, by means of its characteristic reactions—morphine, quinine, conine, brucine, and strychnine; the estimation, by volumetric methods, of arsenic in Fowler's Solution and the Hydrochloric Solution of Arsenic, of iron in *Ferrum redactum*, and of hydrocyanic acid in *Acidum hydrocyanicum dilutum*—standardised solutions being provided.

A detailed knowledge of the special methods of preparation given in the *British Pharmacopoeia* is not necessary; but a knowledge of the characters of, and the qualitative tests for, the foregoing substances will be required.

The fees for Lectures &c. are:—

| | | |
|---|----|---|
| Chemistry, Lectures and Laboratory | £4 | 4 |
| Each Term..... | 2 | 2 |
| Practical Anatomy, Each Term..... | | |
| Biology | 5 | 3 |
| Pharmaceutical Chemistry | 2 | 2 |
| Addenbrooke's Hospital, Medical and Surgical Practice, unlimited period | 8 | 8 |

The above are for courses given by the Professors and fulfilling the requirements for the First and Second Examinations for M.B. But there are other recognised Lectures which may be attended instead of the above or in addition to them:

on Chemistry, in St John's, Caius, King's, Sidney and Downing Colleges—on Botany, at Christ's and Sidney Colleges—on Physiology, in Caius and Downing Colleges.

There are also Lectures on the Principles and Practice of Physic by the Regius Professor (without fee) and University Lecturers; on the Principles and Practice and Surgery by the Professor of Surgery (without fee); Pathology by the Professor; on Physics by the Professor, and in Trinity and St John's Colleges.

An article in the *British Medical Journal* on Medical study in the University, after referring to the first course of proceeding, which has been above described as the one which most students will prefer to follow; adds, "To accomplish it, they must not be idle; for it is evident from the requirements and the character of the examinations, judging from the papers we have seen, that a pretty high standard both of general and medical acquirements is to be maintained. If time and means are at command a longer period may be well employed. The student may devote more time to classical or mathematical study, or to some of the branches of natural science, and, by competing for a higher place in the Classical, Mathematical, or Natural Sciences Triposes, may be repaid by obtaining a fellowship worth £200 or £300 a year, tenable for five or six years; which, we need not say, would materially assist him in attaining a high position in the profession. Several of the most

eminent physicians in London and the provinces have been indebted for their success greatly, if not entirely, to College Fellowships added to University training."

"It will be seen that part of the period of professional study will usually be spent in Cambridge; and we doubt not, the opportunities afforded by Addenbrooke's Hospital and the Professors' Lectures are good. It may be well, for many reasons, that medical studies should be commenced in a quiet, systematic manner in the University; but it is unquestionably very wise that at least a half, and that the latter part of the time, should be passed at one or more of the great medical schools of this country or on the continent. The liability of the mind to be fixed in one set of notions, which is so frequently observable in those who have spent all their time at one school, is provided against by these regulations; and the student, passing from the Professors at Cambridge to the eminent teachers in other great medical schools, will be more likely to acquire the habit of thinking for himself, and of relying upon his own judgment."

The direct inducements, in the way of pecuniary rewards, to the study of Medicine in the University are but few. In Caius College two Scholarships, open to all registered Medical Students of the University of less than eight terms standing, of the value of about £60 each, tenable for three years, are awarded for proficiency in Botany and Comparative Anatomy (including

Zootomy and Comparative Physiology); also a Studentship in Botany worth £90 a year. This is open to all Students of the University of a certain standing.

There are four TANCRED STUDENTSHIPS in Medicine, each of the annual value of £70, tenable for eight years. Candidates for these are examined in Classics and Mathematics at Caius or Christ's College; and the result of the Examination, together with the circumstances of the Candidates, is taken into consideration by the electors¹. The successful students must enter at Caius College within a month of the election, or remove to it if they be members of any other College, and must take the degree of Bachelor of Medicine as soon as they are of sufficient standing for the same. Information respecting vacancies, and the mode of application for these valuable Studentships, the number of candidates for which is always very great, may be obtained from B. J. L. Frere, Esq., New Square, Lincoln's Inn.

There are however in many of the Colleges Scholarships for Natural Science²; and in some, Fellowships are awarded for proficiency in Natural

¹ The electors are the Masters of Caius and Christ's Colleges, the President of the College of Physicians, the Treasurer of Lincoln's Inn, the Master of the Charter-house and the Governors of Greenwich and Chelsea Hospitals.

² A list of these commonly appears in *The Cambridge University Reporter*, and sometimes in *Nature* early in each year.

Science in the same manner as for proficiency in Classics and Mathematics. There are also the Balfour, Clerk-Maxwell and John Lucas Walker Studentship. Information respecting which will be found in the *Cambridge University Calendar*; and there are assistant demonstratorships in Anatomy, Physiology, Pathology, etc.

It must be remembered moreover, that the other Scholarships and Fellowships in the several Colleges, though given as rewards for proficiency in general, and not in medical, study, are open to those who purpose pursuing the study of Medicine. All may join in the competition for them. The sum annually distributed among students at Cambridge, in Scholarships and Exhibitions, has been estimated at about £26,000 annually, exclusive of University Scholarships and Fellowships.

The expenses of obtaining medical and surgical degrees in Cambridge, including those of residence, University and other fees, are estimated at about £150 per annum, during the residence in the University and during the subsequent residence in London or elsewhere; and as five years are required, the sum total is about £750. This is probably very near the mark; though, of course, the expense varies very much with the habits of the student. It need not, especially in the case of a non-collegiate student or of a student at Cavendish College, amount to so much as £100 per annum. For further information on this head we must refer to the article on University Expenses.

THE NATURAL SCIENCES TRIPOS.

By the University regulations every candidate for the Natural Sciences Tripos is required to have passed or obtained exemption from the Previous Examination and one of the "Additional Subjects" viz. Mechanics, French or German. The conditions of exemption are as follows :—

A. The *Higher Certificate of the Oxford and Cambridge Schools Examination Board* excuses (1) from Part I. of the Previous, when the Candidate has passed in Scripture Knowledge (shewing a knowledge of the Greek Text), and in Greek and Latin : (2) from Part II., when the Candidate has passed in Scripture Knowledge, and in Elementary and Additional Mathematics : (3) from the Examination in the Additional Subjects when the Candidate has passed in I. (a) Trigonometry, (b) Statics and (c) Dynamics, or II. French, or III. German.

B. The *Cambridge Senior Local Examination Certificate* excuses (1) from Part I., if the Candidate has passed in Religious Knowledge, including the original Greek of the Gospel, and attained a certain standard intermediate between the ordinary pass standard and that of distinction in the Latin and in the Greek division of Section C :

(2) from Part II., if the Candidate has attained a certain standard intermediate between the ordinary pass standard and that of distinction in Religious Knowledge or Elementary Logic, in Euclid and in Algebra: (3) from the Examination in the Additional Subjects if the Candidate has attained a certain standard intermediate between the ordinary pass standard and that of distinction either (a) in Applied Mathematics, or (b) in French, or (c) in German.

C. The *Cambridge Higher Local Examination Certificate* excuses (1) from Part I., if the Candidate has passed in Religious Knowledge, in Latin, and in Greek: (2) from Part II., if he has passed in Religious Knowledge or Logic, and in Euclid and Algebra: (3) from the Examination in the Additional Subjects if he has passed either in (a) Statics, Dynamics and Astronomy, or (b) in French, or (c) in German.

It is most advisable that a student should obtain exemption from all the parts of the Previous Examination before commencing residence at the University. The amount of knowledge and training that he requires in order to do so is not more than is necessary for his general education, but in order to profit by it effectively he must be able to give some real attention to the different subjects while preparing them for the Examination, and that is impracticable at the University. The pressure of his work for the Natural Sciences Tripos, to be ready for examination in two or three years at most, will be such that the Previous Examination will inevitably be regarded merely as something to be got through with the least possible expenditure of time and trouble, and the educational value

of the subjects comprised in it will consequently be almost destroyed.

If exemption has not been obtained the Previous Examination should be passed at the earliest possible opportunity. For those who commence residence in October the Examination which takes place at the commencement of that month is the most suitable. Postponement till December seriously interferes with the Natural Science work as nearly all courses of Lectures &c. commence in October and the complexity of the organisation is such that the distribution of a student's time ought to be governed exclusively by the requirements of his Science studies. If for any reason a candidate requires a term's tuition in Cambridge before entering for the Previous Examination it would be better for him to commence residence in the Easter Term and to enter for the Examination in the following June or October. This does not affect his standing for admission to the Tripos Examination as the regulations permit him to enter for that in his tenth term although the great majority of the candidates do not commence residence till the Michaelmas term.

Of the three alternative "Additional" subjects Mechanics is the one which, so far as subject-matter is concerned, is most directly connected with the subjects for the Natural Sciences Tripos. Even if a student do not take Physics for the Tripos and is not a candidate for the First M.B. Examination he will find that the acquisition, in some

way or other, of the amount of "Mechanics" required for the two papers is practically essential to his progress. If he take up Physics he will probably choose the Examination in Mechanics as being the easiest of the alternatives. But for a student of moderate ability who is able to extend his horizon beyond the minimum requirement of examinations there is no strong reason for selecting one of the three alternatives in preference to the others. He had better choose that one for which the best teaching, (*i.e.* the most thorough and most interesting) not the best "cramming" is open to him.

When the Previous Examination is passed there is no other University Examination before the Tripos. There are College Examinations either in December or June in each year for which each student has to enter and on the results of which College Scholarships, Exhibitions and Prizes are awarded. These Examinations are organized and conducted by the University and College Teachers on the lines of the Tripos Examination and are designed to test the progress made in the study of the Tripos subjects, so that they do not interfere with the course of reading.

When a student begins his reading at the University he will be expected to take up several definite subjects. For a beginner it would be extremely useful to have had a preliminary introduction to the whole field in which, without going into details, all the different subjects would be briefly

sketched. He would in that way obtain the same sort of information as a relief map or model gives to a traveller; he would frequently be helped in finding his own way by knowing generally how the country lies. Such an introduction every schoolboy ought to have before he comes to the University, but it is not likely that schoolboys will have it for many years to come, as such information unfortunately does not satisfy the condition of being adapted for examination by an external examiner. There is such a general survey sketched out in Paul Bert's *First year of Scientific Knowledge*, and Natural Science students will do well to read it before taking up the study of individual subjects.

The following are the Regulations for the Natural Sciences Tripos which particularly affect students.

A. REGULATIONS AS TO THE PREPARATION OF THE LIST OF CANDIDATES, THE PUBLICATION OF THE CLASS LIST, THE ALLOWING OF THE ORDINARY DEGREE AND EXCUSING THE GENERAL EXAMINATION ON THE RESULT OF THE TRIPOS EXAMINATION, PERMISSION TO DEGRADE. These are applicable to all the Honour Triposes (see *Ordinances*, p. 96).

B. REGULATIONS AS TO THE STANDING OF CANDIDATES (*Ordinances* p. 93).

1. A Student may be a Candidate for Honours in the first part of the Examination for the Natural Sciences

Tripos if at the time of such Examination he be in his fifth term at least, having previously kept four terms: provided that nine complete terms shall not have passed after the first of the said four terms unless the Candidate shall have previously obtained Honours in one of the Honours Examinations of the University, in which case he may be a Candidate provided that twelve complete terms shall not have passed after the first of the said four terms.

2. A Student may be a Candidate for Honours in the second part of the Examination for the Natural Sciences Tripos if at the time of such Examination he be in his eighth term at least, having previously kept seven terms: provided that twelve complete terms shall not have passed after the first of the said seven terms. Provided further that he shall have already obtained Honours in the first part of such Examination, or in the Mathematical Tripos.

4. No Student of a different standing shall be allowed to be a candidate for Honours in either Examination unless he shall have obtained permission from the Council of the Senate.

5. No Student who has presented himself for any of the above Examinations may present himself on another occasion for the same Examination.

7. A Student who shall pass the second part of the Examination for the Natural Sciences Tripos shall be entitled to admission to the degree of Bachelor of Arts provided that he shall have kept the requisite number of terms at the time when he applies for his degree.

9. A Student who shall pass the first part of the Examination for the Natural Sciences Tripos not earlier than his eighth term of residence shall be entitled to admission to the degree of Bachelor of Arts provided that he shall have kept the requisite number of terms at the time when he applies for his degree. A Student who shall pass such Examination earlier than his eighth term shall be excused the General Examination for the B.A. degree.

10. The Examination for the Natural Sciences Tripos

(first part) shall commence on the Monday after the last Sunday in May.

11. The Examination for the Natural Sciences Tripos (second part) shall commence on the Thursday before the last Sunday in May.

13. If Ascension Day fall upon any of the days fixed for one of the Honours Examinations, there shall be no examination on Ascension Day, but all the examinations affected by these regulations which begin not later than Ascension Day shall begin one day earlier (exclusive of Sunday) than is here provided.

16. The Class Lists for the Natural Sciences Tripos (first and second parts) shall be published not later than 9 A.M. on the Friday after the second Sunday in June.

C. REGULATIONS AS TO SUBJECTS &C.

(*Ordinances* p. 56.)

1. The Examination shall be in Chemistry, Physics, Mineralogy, Geology, Botany, Zoology and Comparative Anatomy, Human Anatomy, and Physiology.

2. In the first part of the Examination (see reg. 3) each of the papers, exclusive of those which relate to practical work, shall contain one or more questions in each of the above-mentioned eight branches of Science.

3. The Examination shall consist of two parts: the Class List for each part being published separately.

4. In the first part of the Examination the questions shall be of a comparatively elementary character.

5. In the second part of the Examination four separate papers of three hours each shall be set in each of the above-mentioned eight branches of Science, and some of the questions shall have reference to the Philosophy and History of the Sciences.

6. In the first part of the Examination there shall be a practical Examination, conducted either in writing, or

vivâ voce, or both, in such of the above-mentioned eight branches of Science as the Special Board for Physics and Chemistry together with the Special Board for Biology and Geology in joint meeting assembled, shall from time to time determine, provided that in all those branches of Science in which there is no such practical Examination one or more of the questions in the printed papers shall refer to objects exhibited at the Examination. The Board shall give at least twelve months' notice of the branches of Science in which such practical Examination is to be held.

7. In the second part of the Examination there shall be a practical Examination conducted either in writing, or vivâ voce, or both, in each of the above-mentioned eight branches of Science.

8. The Special Board for Physics and Chemistry together with the Special Board for Biology and Geology in joint meeting assembled, may from time to time define what is to be included in any of the above-mentioned eight branches of Science, and may specify what parts of the several branches of Science are to be considered suitable for the first part of the Examination.

9. In the first part of the Examination, the Examination by printed papers shall take place on the first three days. In the second part of the Examination, the Examination by printed papers shall take place on the first four days or more if necessary.

9*. At least five days before the commencement of the second part of the Examination the Chairman of the Examiners shall issue a time table shewing the days and hours when the papers in each of the eight subjects above-mentioned will be set and likewise the times of the practical Examinations in the several subjects.

12. The names of the Candidates who pass either part of the Examination with credit shall be placed in three classes. The names of those in each class shall be arranged in alphabetical order.

13. In arranging the Class List for the first part of the Examination the Examiners shall be guided by the aggregate knowledge shewn by the Candidates in that part of the Examination; provided that no credit be assigned to a Candidate in any branch of Science unless he appear to the Examiners to have shewn a competent knowledge of that branch of Science.

14. In arranging the Class List for the second part of the Examination the Examiners shall principally regard proficiency in one or more of the following subjects: (1) Chemistry, (2) Physics, (3) Mineralogy, (4) Geology, (5) Botany, (6) Zoology and Comparative Anatomy, (7) Physiology, (8) Human Anatomy and Comparative Anatomy, (9) Human Anatomy and Physiology.

In estimating proficiency in any one subject the Examiner shall take into account so much of the other subjects as is cognate with it. No Candidate shall be placed in the first class for proficiency in one subject unless he shew a competent knowledge of some other subject. In the case of Human Anatomy the merits of Candidates who present themselves for examination shall be estimated jointly by the Examiner who has the principal charge of Human Anatomy, and by either the Examiner who has the principal charge of Physiology, or the Examiner who has the principal charge of Zoology and Comparative Anatomy.

15. When a Candidate is placed in the first class in the second part of the Examination, the subject or subjects for knowledge whereof he is placed in the first class shall be signified in the published list.

The Examiners shall place a distinguishing mark opposite the names of those Candidates who are placed in the first class, whom they shall consider to have specially distinguished themselves either by general knowledge and ability, or by special proficiency in one or more of the above-mentioned subjects. They shall state in each case the ground upon which the distinguishing mark is appended to the name.

Alterations are made from time to time in these regulations on the recommendation of a joint meeting of the Special Boards for Physics and Chemistry, and Biology and Geology. Official publication of a change in the regulations is made in the Cambridge University Reporter. The body referred to above is empowered by regulation 8 to issue more detailed specification of the limits of the different subjects in the first part of the Examination. They have issued the following notice dated 7 Nov. 1885 (*Ordinances* p. 58):

In the papers set in Part I. of the Examination the questions in all the subjects will be of a comparatively elementary character, and will be such as to test a knowledge of principles rather than of details. Specimens may be exhibited for description and determination.

In Physics the questions will be limited to the elementary and fundamental parts of the subject, and in particular, special attention will be paid to the definition of physical quantities, the general principles of measurement, the configuration and motion of a material system, the laws of motion, the comparison of forces and masses, and the properties of bodies. In Sound, Light, Heat, Electricity and Magnetism, only the fundamental laws, their simpler applications, and the experiments which illustrate them, will be required.

In Chemistry the questions will relate to the leading principles and experimental laws of Chemistry, the properties of the commoner elements and their principal compounds, the outlines of Metallurgy, and simple qualitative and quantitative analysis.

In Mineralogy the questions will be confined to elementary Crystallography, the general properties of minerals and the special characters of those species only which are

of common occurrence or of well-known mineralogical importance.

In Geology the questions will be limited to Physical Geography, the interpretation of the structure of the crust of the earth and the history of its formation, so far as to involve only the elementary parts of Palæontology and Petrography.

In Botany the questions will relate to the elementary parts of Vegetable Morphology, Histology and Physiology; and to the principles of a natural system of classification as illustrated by the more important British Natural Orders. Candidates will be required to describe plants in technical language. Questions will not be set on Vegetable Palæontology or the Geographical distribution of Plants.

In Zoology and Comparative Anatomy minor details will not be included in the questions relating to classification. Geographical distribution of animals is held to be a part of Zoology, and Comparative Anatomy includes the structure of extinct as well as of recent forms.

Human Anatomy will include the mechanism of the Human Body, the comparison of its parts with those of lower animals, its development, &c., but the questions will be of a simple and elementary character.

In Physiology the questions will be of a comparatively elementary character.

A practical Examination will be held in each of the above subjects.

The best indication of the nature and scope of the Examination in the various subjects is obtained by the study of the questions set in previous years. The papers of the Triposes are published separately by the University Press and may be obtained from any bookseller price 2s. per set.

In drawing up the class list for the Examination the subjects are all upon an equal footing and may

be represented by the same total of marks. The arrangement of the classes goes by the judgment of the Examiners, it is not necessarily decided by the total of marks without any consideration of the manner in which they have been obtained. The Examiners make their own arrangements to equalize as far as possible the standards in the different subjects.

It follows from the above regulations that a student commencing residence in October 1891 (provided he does not miss more than one term) can enter for Part I. in May 1893 and thereby obtain permission to enter for Part II. in May 1894 or May 1895 or be excused the General Examination for the ordinary degree; or he may enter for Part I. in May 1894 and thereby obtain the B.A. degree in Honours and permission to enter for Part II. in May 1895.

Students who commence residence in the Easter Term 1891 rank with those who commence residence in October 1891, and so do those who commence residence in the Lent Term 1892 though they will not be of standing to take a degree till December 1894, and may therefore have to reside a term after they have passed the Tripos Examination. Students commencing residence in the Easter Term 1892 rank with those who enter in the following October.

Students have to decide whether they shall enter for the first part of the Examination in their second or third year of residence. Those

who aim at distinguishing themselves in Part II. of the Examination generally take the first alternative. In most cases however they are tolerably proficient in some of the subjects before coming into residence; beginners would certainly be ill-advised to attempt the Examination in their second year. The best indication of the proper course to be pursued is to be obtained from the results of the College Examination which takes place at the end of a student's first year or at the beginning of his second. He can then forecast with sufficient accuracy whether or not it would be to his advantage to spend the third year over Part I. The adequate preparation of a new subject for the Tripos, keeping other subjects in hand, requires more than one year so that, as a rough general rule, a student should not enter for the Examination in his second year unless he can get all his subjects started before the end of his first. He may sometimes make use of the Long Vacation for the purpose in view.

He must of course first decide whether he wishes to enter for Part II. at all (see p. 38). Success in Part I. in the second year is not a qualification for a degree, and entry for it should be postponed to the third year unless the candidate intends to enter for some other final Examination for a degree.

PREPARATION FOR PART I.

It will be inferred from Regulations C. 2 and 13 that a student is expected to take up several subjects in the Examination, in fact there is nothing in the regulations to indicate that a knowledge of all the eight branches of science is not expected, but in actual practice the limits of time both in the Examination and in the previous preparation indicate four subjects as the maximum number that can be effectively studied for Part I. of the Tripos. By regulation C. 13 no credit can be given to any candidate for a subject if his answers in it shew that a mere smattering has been acquired, and anything more than a smattering of any subject beyond four is scarcely practicable. Indeed many candidates including a considerable proportion of those in the first class have offered only three subjects; some obtain honours with marks in two subjects and some even with only one. But a candidate who is able to do well enough in one subject, or in two, to get the minimum of marks required for passing, certainly wastes his time and opportunities if he does not learn another subject sufficiently well to get credit for it in the Examination. Each candidate should take three subjects and perhaps an additional one if the time for preparation allows of his doing so. It is difficult to make a satisfactory estimate of the time required by a candidate of average ability for the preparation of a subject

for the Tripos but judging by the lists of lectures of the last few years, and regarding preparation for a subject as consisting in the attendance at, and preparation for, one course of lectures (3 per week) and practical work during term time, with some allowance for revision, the time necessary for the different subjects for an intelligent student *previously unacquainted with the subject* would be as follows¹ :—

Physics. Three years.

Chemistry. Between two and three years.

Mineralogy. Between one and two years.

Geology. About two years.

| | | | | |
|---------------------|-------------|------------------|--------------|-----|
| Botany | } Including | } Fully 2 years. | | |
| Comparative Anatomy | | | } Elementary | Do. |
| Physiology | | | | Do. |
| Human Anatomy | | | } Biology. | Do. |

The necessary time may be reduced by study of a subject before commencing residence and in the Vacations, especially in the Long Vacation when the Laboratories are open.

Assuming then that the student is to devote his attention to three or at most four subjects it becomes important for him to settle which of the eight he will select. He would be considerably helped in this by the preliminary introduction recommended above (p. 5). The different branches

¹ The allowance of time for any subject is estimated on the assumption that several subjects are studied concurrently.

of science are all closely related one to another, notwithstanding the conventional and more or less arbitrary divisions between them. They form a connected tissue into which may be woven all that is known about the phenomena of nature and their relation to each other. They all follow the same scientific method. They are based upon accurate observation of natural phenomena; and the processes of development of the different branches are the same for all and are briefly, the comparison and classification of the facts observed so as to establish general natural laws connecting different classes of phenomena, and the confirmation of the truth of the laws by the deduction from them of new facts to be submitted to the test of experiment or observation. The prediction of the time of an eclipse from the application of the laws of motion to the case of the motion of the heavenly bodies, and the prediction of the effect of the inoculation of an animal with bacterial germs of a particular kind under physical conditions that have never previously been maintained from the knowledge of the laws that govern the propagation of the germs, are both results of reasoning of a fundamentally similar character applied to widely different subjects and differing widely in detail. The different branches of science while differing as to their subject-matter are thus all alike in their way of treating it. They differ also very markedly (as represented in the questions set in the Natural Sciences Tripos) in respect of the

stage of development which they have severally reached. In the history of each science the inductive side (the establishment of laws by the comparison and classification of facts) precedes the deductive side (the deduction of new facts by the application of reasoning). As a subject develops the deductions become more and more elaborate and the detailed observations from which the laws of the subject were originally inferred receive less and less attention. Thus in the oldest of the Natural Sciences, Geometry, the natural laws, which are based upon common observation and every day experience, are lightly passed over at the present day and disposed of as being "obvious"—as indeed all natural laws probably are as soon as we are sufficiently familiar with the facts to realise the evidence for them without conscious mental effort. The student's whole attention is then directed to deduction; and the study of Geometry as now practised is nothing but the deduction from the definitions and axioms of a number of facts which the student is not even expected to verify by observation. For some examinations in which many of the subjects comprised in the term "Physics" are included, students are expected to accept the general laws and make deductions from them by processes of mathematical reasoning without consideration of actual experiments; the inductive side is accepted as definitely settled by the previous exertions of philosophers of repute. But in sciences which are

really not more modern but are less developed, as the Biological Sciences, the necessary facts are not so easy of observation nor are the laws so easily summarized, and the student's attention is mainly directed to the observation and comparison of the facts; he deals mainly with the inductive side of the subject.

This point of difference between the sciences is insisted on at length because it is upon it that the aptitude and taste for one particular science or another seem mainly to rest. An interest in inductive reasoning, in the actual observation and classification of facts and the simple deductions from them, appears to be the common property of all persons of all ages, though people stand as widely as the poles asunder in their capacity for detecting for themselves the hidden natural law that connects the phenomena they observe; the capacity for elaborate deduction on the other hand is a gift enjoyed by comparatively few people, it is essentially mathematical, and as the deductive side of a science grows, mathematical symbols are introduced for the purpose of carrying a group of ideas through a long train of reasoning, so that the more developed sciences tend to become more mathematical, not from the mere whim of its professors as is sometimes supposed, but simply because mathematical reasoning is itself very powerful machinery for the development of the science. In every science there is the inductive side in which there always remain large fields still unexplored.

As more powerful apparatus is designed new facts are always brought to light and in every science there will always be room for the worker who deals with the inductive side alone and who leaves elaborate deduction to the mathematician; but there can be no doubt that the sciences of Physics, Chemistry, Mineralogy and Geology, especially the first, are at the present day best served by those who are familiar with both sides. The same may be equally true of the other sciences. The problems which the Physiologist or the Anatomist sometimes puts before the Physicist or Chemist are often such as cannot be solved by direct experiment and generally require more powerful deductive machinery than the person appealed to keeps in stock. It is not uncommon in examinations to confine the sciences to the inductive side by including a regulation to limit the mathematics required in the physical sciences to elementary algebra and trigonometry. The sciences are then called experimental. There is no such regulation in the Natural Sciences Tripos but the tradition has been to set only questions that do not require more mathematics than that indicated. Of late years however physical and chemical studies have been very much extended by reasoning which is essentially mathematical in idea even when the mathematical form has been avoided and this movement has been reflected in the questions set in the Natural Sciences Tripos, so that a student who finds mathematical reasoning incomprehensible and uninteresting may expect to

meet with serious difficulty in the theoretical parts of the Physics, Chemistry and Mineralogy of the Natural Sciences Tripos. Such a student would therefore naturally choose his subjects from the Biological branches Physiology, Human and Comparative Anatomy and Botany. He may substitute Geology for Human Anatomy or one of the others named, and the purely experimental side of Chemistry is still so fully represented in the Examination that that subject is still very frequently taken up by students whose chief interest lies in the Biological Sciences.

And this is only reasonable, for the different branches of science are related to each other not only by being followed on the same method but also as regards their subject-matter. Without aiming at giving precise and scientific definitions, we may regard Physics as being that branch of science which treats of the properties of matter and its motion in finite masses, Chemistry as the science which deals with the ultimate constitution of matter and the laws of combination and decomposition of substances, and Biology as the science which treats of the functions, structure, arrangement and development of the parts of living organisms. Then everything in Biology beyond the description and classification of the present forms of plants and animals depends for its progress upon a knowledge of Chemistry and Physics. "Mineralogy is only the Chemistry and Physics of substances which are found ready formed in

the inorganic world." And Geology is the application of Physics, Chemistry and Biology to problems connected with the past history of the earth. It is therefore essential that all students of Natural Science should be acquainted with the descriptive or experimental side of Physics and Chemistry. And those who intend to devote themselves to the Biological sciences should not omit to make themselves familiar with such books as Balfour Stewart's *Elementary Lessons in Physics*¹ and Roscoe's *Elementary Lessons in Chemistry*² and the experiments which they describe. The course which is laid down for the Chemistry and Physics of the First Examination for the degree of M.B. should be exactly suitable, and is no doubt specially designed to serve a purpose exactly corresponding with that here indicated but the Examination is tending to run too much into the rut of formulæ and sums. Most students will find it advisable to continue their study of Chemistry beyond the limits indicated and to take it as one of the subjects for the Tripos; it would be well if they would do the same with Physics, but in too many cases the Examination forbids this unless the student has a special taste for the subject.

We have given the general principles which must guide a student's choice of his subjects; we may consider some classes of students who have special reasons to take into account.

¹ Or Everett's *Elementary Physics*.
Or Remsen's *Elementary Chemistry*.

Medical students will naturally take Physiology and Anatomy as two of their subjects; Chemistry, Comparative Anatomy and Botany are the subjects usually associated with these from which one or two should be selected.

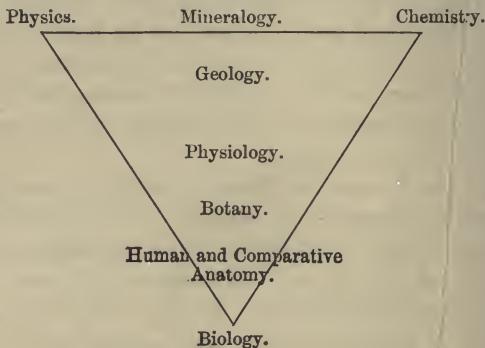
There is a considerable class of students who have a good knowledge of Physics and Chemistry when they commence residence and who wish to make these their chief subjects in the Tripos. Their choice of additional subjects should be guided by their intention with regard to their work after their degree. For those who intend to become teachers of Natural Science in Schools the combination of Physical and Biological subjects furnishes the best education; they should take the course of Elementary Biology (referred to on p. 34) and follow that up by the study of Physiology with Botany or Comparative Anatomy. This is unfortunately becoming increasingly difficult for those students who wish to take the Examination in their second year as the course in Elementary Biology which is a necessary preliminary can only be completed at the end of the first year, leaving barely time enough for the satisfactory study of the other subjects. There is however no such difficulty for those who have an acquaintance with Biology before commencing residence nor for those who take the Examination in their third year. The same course may be suggested to those whose plans for the future are not sufficiently definite for them to get any directive influence from them.

There is further a class of students who from a distaste for Biological study or for some other reason prefer to confine themselves to the Physical branches of science. Such a student should take Physics, Chemistry and Mineralogy with Geology for a fourth subject. The department of Palæontology in the last named is really the Botany and Zoology of past time and for its proper study a Biological training is required, but the necessary introduction can be supplied by reading, with the use of the museums, without taking up the course in the regular manner.

There is one other group of subjects: Geology, Botany, Comparative Anatomy and Chemistry, which would be suitable for a candidate who wishes to give most of his attention ultimately to the Palæontological side of Geology. The thorough study of Geology requires also a good knowledge of Physics. The student whose principal subject is Geology must therefore have a good general scientific education. He has a very wide choice of subsidiary subjects for the examination.

The following diagram shews the natural grouping of the subjects and will help to indicate the most reasonable selections if three subjects only are taken up for examination. In it the eight subjects are regarded as based upon Physics, Chemistry and Biology, the three fundamental divisions of Natural Science, which are placed at the three corners of the figure. The names of the other subjects are so placed as to indicate by their

relative proximity to the respective corners the closeness of association of the different subjects with the fundamental ones. Thus Mineralogy depends upon Physics and Chemistry and is not associated with Biology, while Physiology is about equally connected with all three branches.



The method of preparation for the Examination that is followed in the University is the ordinary one of Lectures, and Laboratory classes at which practical work is done by the students themselves. There is no doubt a danger as the teaching becomes more and more organized of the student forgetting that there may very easily be too much teaching and too little learning. The student's part is the learning and he has got to do that for himself no matter how concisely and effectively the subject may be arranged by the teacher. Most lectures require some preliminary preparation

by reading books. It is usual for the lecturer to announce the titles of books recommended at the first lecture of a course and to rely upon a knowledge of the contents of the books in the progress of the course. He is generally willing to mention them again to anyone who asks for the information and would indeed prefer to do so rather than have some members of the class remain in ignorance of their existence and value during a course of lectures.

The books should be read at home, and in arranging their work students should take care that they have adequate time for preparation. The evening is as a rule the only part of the day that is available, as lectures and practical work take up the morning, and sometimes the afternoon as well has to be spent in the Laboratory.

The lectures are sometimes supplemented by weekly papers of questions. From an examination point of view this is a very valuable supplement, it is frequently a synoptical index of the week's work. But in order that the full benefit may be derived from the arrangement the questions should be worked out and not merely looked at. The lecturers and demonstrators are always willing to help students by the explanation of any difficulties that arise, even when the difficulty in question is due to non-attendance or inattention at a previous lecture.

Private tuition can be obtained, three hours per week, at £9 per term and £10 for about six weeks in the Long Vacation. It is quite unneces-

sary in term time if a student makes fair use of his opportunities. It is sometimes advisable in the Long Vacation.

For the teaching of the Natural Sciences, including those branches which form part of the course of study for Medical and Surgical degrees, the University and some of the Colleges are associated in an elaborate organisation in which Professors, Readers, University and College Lecturers and Demonstrators in University and College Laboratories take part. The following table shews the staff of teachers in the different subjects of the Natural Sciences Tripos.

| SUBJECT. | TEACHERS ¹ . | LABORATORIES, MUSEUMS, &c. |
|----------|---|-------------------------------|
| PHYSICS. | [Lucasian Professor of Mathematics.] Professor of Physics. University Lecturer. Caius College do. St John's do. Trinity do. Emmanuel do. Assistant Director of the Cavendish Labo- ratory. 5 Demonstrators. [Lectures are also given by 2 members of the Senate recognised by the Board of Studies.] | Cavendish Labora- tory. |

¹ In some instances University appointments are held with a College Lectureship. Demonstrators are appointed in the various departments to meet the requirements of large classes.

| SUBJECT. | TEACHERS. | LABORATORIES, MUSEUMS, &c. |
|-------------|--|---|
| CHEMISTRY. | Professor of Chemistry. Jacksonian Professor of Natural Experimental Philosophy. University Lecturer in Organic Chemistry. Assistant to Professor of Chemistry. 2 Demonstrators at the Chemical Laboratory. Clare College Lecturer. Caius College Prelec- tor. King's College Lec- turer. St John's do. Sidney do. Downing do. | University Labora- tory. Caius College Labo- ratory. St John's do. Sidney do. Downing do. |
| MINERALOGY. | Professor of Minera- logy. Demonstrator of Mine- ralogy. | Museum of Mine- ralogy and Mine- ralogical Labora- tory. |
| GEOLOGY. | Professor of Geology. University Lecturer in Geology. St John's College Lec- turer. Demonstrator in Geo- logy. Assistant to the Pro- fessor. | Woodwardian Mu- seum. |
| BOTANY. | Professor of Botany. Reader in Botany. 2 University Lecturers in Botany. Demonstrator in Botany. Assistant Curator of the Herbarium. | Herbarium Botani- cal Museum. Botanical Labora- tory. Botanic Garden. |

| SUBJECT. | TEACHERS. | LABORATORIES, MUSEUMS, &C. |
|--|--|--|
| ZOOLOGY AND COMPARATIVE ANATOMY. | Professor of Zoology and Comparative Anatomy. Reader in Animal Mor- phology. University Lecturer in Advanced Morpho- logy of Vertebrates. University Lecturer in Advanced Morpholo- gy of Invertebrates. King's College Lectu- rer. Christ's do. Trinity do. Demonstrator of Com- parative Anatomy. Demonstrator of Ani- mal Morphology. | Museum of Zoology and Comparative Anatomy. Strick- land Collection. Morphological Laboratory. |
| PHYSIOLOGY. | Professor of Physio- logy. 2 University Lecturers in Advanced Physio- logy. University Lecturer in Histology. Caius College Lecturer. Trinity do. Downing College do. 2 Demonstrators of Physiology. | Physiological Labo- ratory. |
| ANATOMY AND PATHOLOGY. | Professor of Anatomy. Professor of Patho- logy. University Lecturer in Advanced Human Anatomy. Jesus College Lecturer. 3 Demonstrators of Human Anatomy. Demonstrator in Pa- thology. | Anatomical and Pathological Museum. Anatomical School. Pathological Labo- ratory. |

The time table of lectures and practical work is contained in the lists of lectures compiled by the Special Boards for Physics and Chemistry and for Biology and Geology and issued by the General Board of Studies at the end of the Easter Term of each year. A revised and corrected edition is issued at the beginning of each Term. Copies may be obtained from any bookseller, price 3*d.* each.

The Special Board for Medicine also issues a list of lectures in Natural Science and Medicine which includes the greater number of those in the lists of the other two Boards. Medical students should notice that if a course of lectures is not included in the list of the Medical Board their attendance thereat does not help towards counting a medical term.

The arrangements for lectures, &c. are always being changed and the lists tend to become larger. As they stand at present (Sept. 1891) they may be analysed into the scheme of elementary instruction which is given in the following Table. In order to give an idea of the scope and range of the different courses the titles of books which may be used in preparation for them have been given in a separate column. The selection of books for use in a course rests however with the lecturer and not with the author of this article so that too much stress must not be laid upon the selection given.

The course of elementary instruction in a subject consists generally of an hour's lecture on

alternate days (M. W. F. or T. Th. S.) followed by illustrative practical work for about two hours. In Elementary Biology, Botany, Physiology, Comparative Anatomy, and in some of the courses on Physics and Chemistry the practical work is definitely associated with the lectures in its order and arrangement; in the other courses of Physics and Chemistry and in the other subjects it is not so, or at least not so completely. But in all cases there is opportunity for carrying on the practical work at other times than that immediately following the lectures. An elementary course generally commences in the Michaelmas Term and extends over three terms.

In calling some of the courses "first year" and some "second year" the point of view taken is that of the student who *begins the study of the subject* at the University. Anyone coming up with a fair knowledge of a subject might take the "second year" course in that subject.

TABLE OF COURSES OF INSTRUCTION IN THE SUBJECTS OF PART I. OF THE NATURAL SCIENCES TRIPOS [SEPTEMBER 1891].

PHYSICS.

| LECTURES, &c. | BOOKS. |
|---|---|
| Two 3-term First-year courses of lectures with rudimentary practical work. (For First M.B. Examination.) Commencing in the Michaelmas Term. | Everett's <i>Text-Book of Physics</i> , or Balfour Stewart's <i>Elementary Lessons in Physics</i> , (Blaikie's <i>Dynamics</i> . Garnett's <i>Heat</i> . or Lewis Wright's <i>Light</i> . S. P. Thompson's <i>Electricity and Magnetism</i> .) |
| A 3-term Second-year course of lectures with practical work, commencing in the Michaelmas Term. | Maxwell's <i>Matter and Motion</i> . Lodge's <i>Mechanics</i> . Maxwell's <i>Heat</i> . Balfour Stewart's <i>Heat</i> . Glazebrook's <i>Physical Optics</i> . Jenkin's <i>Electricity and Magnetism</i> . Cumming's <i>Electricity and Magnetism</i> . Maxwell's <i>Elementary Electricity</i> . Glazebrook and Shaw's <i>Practical Physics</i> . |
| Lectures on special branches, revision lectures and practical work. | Tait's <i>Properties of Matter</i> . Tait's <i>Heat</i> . Stewart and Gee's <i>Practical Physics</i> (Selected portions). |

CHEMISTRY.

| LECTURES, &c. | BOOKS. |
|---|---|
| <p>A 2-term beginners' course commencing in the Michaelmas Term with practical work.</p> <p>Two 3-term beginners' courses do. do.</p> <p>Two 3-term beginners' courses commencing in the Lent Term with practical work.</p> | <p style="text-align: center;">For First M.B. Examination.</p> <p>Roscoe's <i>Elementary Lessons in Chemistry</i>, or Remsen's <i>Inorganic Chemistry</i>. Remsen's <i>Organic Chemistry</i>. (<i>Selected portions.</i>) Fenton's <i>Notes on Qualitative Analysis</i>.</p> |
| <p>A 3-term second year's course commencing in the Michaelmas Term with practical work.</p> | <p>Cooke's <i>New Chemistry</i>. Thorpe's <i>Metals and Non-metals</i>, or Miller's <i>Chemistry</i>, vol. ii., or Richter's <i>Inorganic Chemistry</i>. Remsen's <i>Organic Chemistry</i>, or Armstrong's <i>Organic Chemistry</i>, Ostwald's <i>Outlines of General Chemistry</i>, or Tilden's <i>Chemical Philosophy</i>, or Remsen's <i>Chemical Theory</i>. Fenton's <i>Notes on Qualitative Analysis</i>, and Dittmar's or Clowes' <i>Chemical Analysis</i>. Thorpe's <i>Quantitative Analysis</i>.</p> |
| <p>Lectures on special branches, revision lectures and laboratory work.</p> | |

MINERALOGY.

| LECTURES, &c. | BOOKS. |
|---|--|
| <p>Lectures in 2 Terms in Mineralogy and Crystallography. Courses of demonstrations in Mineralogy, arranged to suit the requirements of different classes of students.</p> | <p>The work has to be picked out of several books of which the following are the principal: Gurney's <i>Crystallography</i>. Huntingdon Williams' <i>Crystallography</i>. de Lapparent, <i>Cours de Mineralogie</i>. Jameson's <i>Mineralogy</i>. E. S. Dana's <i>Mineralogy</i> (14th Edition). Broke and Miller's Edition of Phillip's <i>Mineralogy</i>. Tschermak's <i>Mineralogie</i>. Miller's <i>Tract on Crystallography</i>. Miller's <i>Treatise on Crystallography</i>. Glazebrook's <i>Physical Optics</i>. Preston's <i>Light</i>. Groth's <i>Physikalische Krystallographie</i>.</p> |

GEOLOGY.

| LECTURES, &c. | BOOKS (continued). |
|--|--|
| <p>3-term course commencing in the Michaelmas Term. Lectures on special branches and work in the Museum and in the field.</p> | <p>A. Geikie's <i>Class-Book of Geology</i>, or Page and Lapworth's <i>Introductory Text-Book of Geology</i>. Jukes-Browne's <i>Historical Geology</i>. Hatch's <i>Petrology</i>, with A. Geikie's <i>Text-Book of Geology</i>, and A. B. Woodward's <i>Geology of England and Wales</i> as reference books.</p> |
| <p>BOOKS.</p> | |
| <p>A. Geikie's <i>Elementary Lessons in Physical Geography</i>, or Page and Lapworth's <i>Introductory Text-Book of Physical Geography</i>.</p> | |

ELEMENTARY BIOLOGY.

| LECTURES, &c. | BOOKS. |
|--|--|
| 2-term course with practical work commencing in the Lent Term. | Huxley and Martin's <i>Practical Biology</i> . Marshall and Hurst's <i>Practical Zoology</i> . A. Milnes Marshall, <i>The Frog</i> . |

BOTANY.

| LECTURES, &c. | BOOKS. |
|--|--|
| 3-term course with practical work commencing in the Michaelmas Term. Lectures on special branches and practical work. | Prantland Vines, <i>Elementary Text-Book of Botany</i> . Sach's <i>Lectures on the Physiology of Plants</i> . Göbel's <i>Outlines of Classification and Special Morphology</i> . Vines, <i>Physiology of Plants</i> . Bower's <i>Practical Botany</i> . Oliver's <i>Lessons in Elementary Botany</i> , or Strasburger's <i>Practical Botany</i> . Bentham and Hooker's <i>Handbook of the British Flora</i> . |

COMPARATIVE ANATOMY.

| LECTURES, &c. | BOOKS. |
|--|--|
| 3-term course (and supplementary lectures) and practical work commencing in the Michaelmas Term. | Claus, <i>Text-Book of Zoology translated by Sedgwick</i> . Foster and Balfour's <i>Embryology</i> . Huxley's <i>Anatomy of Invertebrated Animals</i> . Huxley's <i>Anatomy of Vertebrated Animals</i> . Gegenbauer's <i>Comparative Anatomy</i> . Parker's <i>Zootomy and Biology</i> . Flower's <i>Osteology of the Mammalia</i> . |

PHYSIOLOGY.

| LECTURES, &c. | BOOKS. |
|--|--|
| <p>3-term course with practical work commencing in the Michaelmas Term. Supplementary lectures and practical work.</p> | <p>Huxley's <i>Physiology</i>. Yeo's <i>Manual of Physiology for the use of Junior Students</i>. Foster's <i>Physiology</i> (last edition). Landois and Stirling's <i>Text-Book of Human Physiology</i>. Klein's <i>Elements of Histology</i>, or Schäfer's <i>Elements of Histology</i>. Foster and Langley's <i>Practical Physiology</i>.</p> |

HUMAN ANATOMY.

| LECTURES, &c. | BOOKS. |
|---|---|
| <p>[Preliminary study of Osteology with examination.] Lectures and Demonstrations in Anatomy in each Term and in the Long Vacation. The Class may be joined in any term but the course begins in the Michaelmas Term.</p> | <p>Macalister's <i>Text-Book of Human Anatomy</i>, or Quain's <i>Anatomy</i>. Gray's <i>Anatomy, Descriptive and surgical</i>. Wiedersheim's <i>Elements of Comparative Anatomy of Vertebrata</i>. Ellis's <i>Demonstrations of Anatomy</i>. Gegenbauer's <i>Human Anatomy</i>. Testut's <i>Traité d'Anatomie Humaine</i>.</p> |

The lectures are given in the morning between 9 A.M. and 2 P.M. The practical work may be in the mornings or afternoons as the laboratories &c. are generally open till 5 or 6 o'clock.

The fees charged for the lectures and practical work are stated in each case in the lecture-lists already alluded to. In Physics and Chemistry the laboratory fee is £3. 3s. The fee (if any) for lectures is £1. 1s. in addition. In other subjects the inclusive fee for lectures and laboratory is as a rule £2. 2s. per term with a small additional charge in some cases for the use of a microscope. Sometimes a single fee for a whole course is charged. A student reading three subjects in one term may expect to incur charges of from £8 to £10 for lectures and laboratory fees. At most Colleges allowance is made to the students from the Tuition Fund to meet part of this expense.

In addition to the instruction indicated above some of the Colleges make arrangements for the regular supervision of the work of their students in the various subjects.

The Long Vacation (from the end of the first week in July to the beginning of the last week of August) is a very valuable time for Natural Science students. The Laboratories¹ are open under the supervision of the Demonstrators and the student can work at his leisure at those parts

¹ The Cavendish Laboratory is open only to students who personally obtain permission from the Professor. It is generally restricted to those who have already attended two terms, except in the case of those who have graduated in the Mathematical Tripos, for whom there is a special class in practical work.

of the subjects that most require his attention. There are usually also lectures on some of the medical subjects.

The organisation of the teaching and its arrangement in courses may result with some students in the exclusion from their view of those branches of science which are not strictly included under any single subject. It is a great misfortune if this result should follow for they miss much of the most interesting work of modern science. Such books as Balfour Stewart's *Conservation of Energy*, and the subjects treated in Helmholtz's *Popular Lectures* or in Sir W. Thomson's *Popular Lectures and Addresses* are of great value to students of Natural Science although they may not fit in with any specific course of lectures. On the Biological side Wallace's *Island Life* and Darwin's *Origin of Species*, *Descent of Man* and other works may be referred to in like terms. Such works as these, that do involve attendance at a laboratory, may be very profitably read in such times as the Christmas and Easter Vacations.

It may be well to close our remarks on the preparation for Part I. of the Tripos with a word of warning to those who come from schools with a considerable knowledge of some of their subjects, a class of students to whom reference has already been made more than once. In Natural Science, unlike Mathematics and other studies, there is no graduated division of the subjects into sections,

and the freshman who has already studied Chemistry and Physics will set to work to study the subjects again with the same names, and to some extent going over the old ground. It is not always easy under these circumstances for a student to make real progress. He is apt to think that what he has heard before he knows, and therefore need not pay attention to, and that what he has not heard before cannot be important and may therefore be disregarded ; in this way at the end of his course of study he is not far advanced from where he stood at the beginning.

PREPARATION FOR PART II.

The second part of the Natural Sciences Tripos is open to those who have passed Part I. and to those who have passed the Mathematical Tripos Examination. It may be taken either at the end of a student's third year or fourth year provided he has previously passed one of the two qualifying examinations referred to above. Formerly the time table of the two parts was so arranged as to enable a candidate to pass both parts in the same year but now it is not possible to do so. A student who passes Part I. in his second year may have one or two years of preparation for Part II. at his discretion whereas a student who passes Part I. or the Mathematical Tripos in his third year has only one year. Whether a student should be encouraged to devote two years to

study for Part II. or should be advised to enter with one year's reading only depends so much upon the individual circumstances of each case that it is difficult to lay down any general rule beyond the very obvious one that in most cases a candidate's chance of a high place in the class list is improved by an additional year's reading. It is by no means a necessary consequence that his chance is so much improved as to be worth the year's outlay. Some students who are able to read effectively for Part I. cannot accommodate themselves to the change of style of reading that is necessary for Part II. Another question which also requires individual knowledge for its satisfactory answer is whether a student who has obtained a degree by Part I. should enter for Part II. at all. In cases where the student himself has any hesitation about the matter there is seldom any utilitarian advantage to be obtained which is not already secured by success in Part I.; and the educational advantage is not very great unless the student takes up the subjects from that personal interest in them which gives life to the study. For deciding these two questions the Professors and College Lecturers or Tutors can frequently give the requisite advice. It need hardly be said that a year is an extremely short time for preparation for Part II. unless the candidate has laid a very good foundation before his specific preparation commences. This remark applies both to students who qualify for Part II. by passing

Part I. and to those who qualify by the Mathematical Tripos.

In arranging the class list for Part II. regard is had to proficiency in one or more of the nine subjects. The subject for which any candidate is placed in the first class is indicated in the class list. The names of the subjects given in the regulations should be carefully noted; it will be seen that Human Anatomy does not form a subject by itself, but Human Anatomy with Physiology is a subject, and so is Human Anatomy with Comparative Anatomy. Attention should also be drawn to the provision which prevents a candidate being placed in the first class for proficiency in one subject unless he shews a competent knowledge of some one of the other subjects. This is the last outcome of repeated endeavours to secure by means of formal regulation that each subject shall be studied in a sufficiently broad manner and to bring the borderland between the different sciences clearly within the range of the Examination. It seems that the regulation is a difficult one to work; the precise meaning of the word "Competent" is not clear and it is left to the discretion of the Examiners to be interpreted in such a way that candidates may be encouraged to read their subjects thoroughly, in breadth as well as in depth.

Up to quite recently the papers in the second part included questions in every subject as in the first part of the Examination, but from 1889 four

separate papers in each subject have been set, and candidates are able to shew their knowledge of a second subject without trespassing on the limited time allowed for the questions in their chief subject.

The course of reading for Part II. is essentially different from that for Part I. The Examiners are subject to no restrictions in setting the questions, and the conventional limitations of the subject to the range of text-books are no longer valid. Some knowledge of the recent developments of the different subjects and of the important problems with which the workers in them are engaged may be asked for, or at least implied in the questions, and such knowledge can only be obtained in a published form in the scientific journals devoted to the subjects in question¹. The student would do well to make a practice of looking through some of the journals mentioned as they appear, he will thereby become *au fait* of the general aspect of the most interesting questions of the day. For more specific direction as to the precise course of his reading he must depend upon the advice of his Lecturers. By the time he is in a position to commence

¹ These may be found either in the University Library or in the Philosophical Library. The latter is in the centre of the New Museum buildings. Any student may be admitted on the recommendation of a teacher in the Scientific subjects.

his study for Part II. he will have learned where he can obtain the requisite information.

The student who is intending to enter for Part II. will do well to bear in mind throughout his course that a knowledge of foreign languages, particularly French and German, will be of great advantage to him and indeed almost indispensable. He should therefore not neglect the opportunities that most boys have of learning the rudiments of those languages. If he has his subjects well in hand and has a clear notion of what the course before him is he may very profitably spend a Long Vacation in France or Germany before he takes Part II. He can obtain an introduction to a foreign Laboratory and gain valuable experience there as well as a conversational acquaintance with the language.

We have throughout kept in view the regulation that in each subject there is a practical examination as well as a written examination. There is some danger that students should treat the two sides of a subject as though they were separate and try to make separate preparation for them. There can be no greater mistake. The subjects are all experimental and all depend upon practical work. After long study a student may become so familiar with the subject that he is able to follow the description of a piece of apparatus or

an experiment and fully realise what is described, but with a beginner this is not likely to be the case and he, in his reading, should take care to note those things that require further experiment and observation and seek an opportunity of obtaining the necessary knowledge either in the Laboratory or Museum. On the other hand the practical work is meant to illustrate and visualize the instruction and a certain amount of knowledge is presupposed in it. The time is wasted when the student merely performs the work mechanically in accordance with a paper of instructions; the work then degenerates into cookery and is no longer scientific. The practical work should be preceded by the reading necessary to make it intelligent—in some subjects this may mean special preparation to be arranged for by ascertaining before-hand what the next piece of work is to be. When properly used it will furnish many suggestions as to points requiring further reading and inquiry and if these are followed up a real and comprehensive knowledge of the subject is the result. The requisite explanations can sometimes be found in books and sometimes supplied by teachers and if all available sources of information fail there is no harm in the student's having found that he has reached in that direction the boundary of actual knowledge of the subject; he will be fortunate if he subsequently finds the opportunity of extending that boundary by himself furnishing the explanation that he seeks,

making such additional experiments as are necessary to furnish a sound basis for it.

Practical work is intended as an exercise in manipulation as well as for the elucidation of the subject-matter and for that reason among others requires the different experiments to be thoroughly worked out. There is a strong temptation for a student whose ability is above the average to stop an experiment as soon as he sees "how it is done," being content to believe that if he pursued the method he would obtain the expected result. Experience alone will teach him how much he loses by yielding to the temptation, whether his object be merely success in examination or a knowledge of the subject and the methods of pursuing it. He is not unlike a landsman who thinks he knows exactly what a sea voyage would be like when he has inspected a ship in harbour with its sails, its rudder and its compass and has looked at the waves from the shore. When he really makes the experiment he too will find that there are many things to learn by the way.

APPENDIX.

SCHOLARSHIPS, PRIZES, ETC. OFFERED TO STUDENTS OF NATURAL SCIENCE.

ENTRANCE Scholarships or Exhibitions in Natural Science are offered annually for competition at Peterhouse, Clare, Caius, King's, Jesus, Christ's, St John's, Trinity, Emmanuel, Sidney Sussex, Downing and Cavendish. The Examinations are generally in March or December. Particulars can be obtained on application to the Tutors of the respective Colleges.

At most of the Colleges Natural Science students have an equal opportunity with other students in the annual distribution of Scholarships and Exhibitions to resident members. Fellowships are likewise open to them.

The rewards offered by the University are :

Clerk Maxwell Scholarship, in connexion with the Cavendish Laboratory, for the advancement, by original research, of Experimental Physics, especially of Electricity, Magnetism and Heat. Open to all members of the University who have

been students for one term or more at the Cavendish Laboratory. Tenable for 3 years. Annual value about £180.

Sedgwick Prize offered once in 3 years for the best essay on some subject in Geology or the kindred sciences. Open to all graduates of the University who have resided 60 days during the twelve months preceding the day on or before which the Essay must be sent in. Value about £80.

Harkness Scholarship, for the encouragement of the study of Geology and Palæontology. Open to any member of the University who has passed some final examination for the degree of B.A. within 3 years of his passing such examination. Tenable 1 year. Annual value about £100.

Balfour Studentship. The holder must devote himself to original research in Biology, especially Animal Morphology. The student need not be a member of the University. Tenable for 3 years. Annual value £200.

John Lucas Walker Studentship and Exhibitions devoted to the furtherance of original research in Pathology. Open to all persons of either sex whether members of the University or not. Aggregate annual value upwards of £300.

The following are the special foundations at various Colleges for the encouragement of Natural Science Studies. In cases where they are open

to members of other Colleges the successful candidate must on his election join the College offering the Scholarship or Exhibition.

CAIUS COLLEGE.

Two Shuttleworth Scholarships of about £60 each, tenable for 3 years, awarded for proficiency in Botany and Comparative Anatomy. Open to all registered medical students of the University who are not of less than 8 terms standing.

Frank Smart Studentship in Botany, worth £90 per annum, tenable for 2 or 3 years. Open to all members of the University of a certain standing.

Four Tancred Studentships each of the annual value of £70 for Medical Students, tenable for eight years by students who are elected previous to admission at any College.

KING'S COLLEGE.

Vintner Exhibition of £70 per annum for proficiency in Natural Science. Open to all undergraduate members of the College in their first or second year of residence and to other candidates under 19 years of age.

ST JOHN'S COLLEGE.

Two Hutchinson Studentships for the encouragement of Physical or Natural Science or in promoting the study of the Semitic or Indian

languages. Annual value not more than £60 each. Tenable with a Scholarship and open to students of the College engaged in any of the above studies who are of not less than 9 and not more than 18 terms standing.

TRINITY COLLEGE.

Coutts Trotter Studentship. Value £250 per annum for the promotion of original research in Natural Science, more especially Physiology and Experimental Physics. Awarded at intervals of not more than 2 years. Open to graduates of the College (not being Fellows) who are of not more than 7 years standing from the time of commencing residence.

MORAL SCIENCES TRIPOS.

THE examination for the Moral Sciences Tripos consists of two parts; and begins, as a rule, upon the Monday after the last Sunday but one in May. No student may present himself for both parts in the same year.

The first part consists of two papers on each of the following subjects: Psychology including Ethical Psychology; Logic and Methodology; Political Economy; together with a paper of Essays.

A candidate for honours in this part must be in his fifth term at least, having previously kept four terms; but nine complete terms must not have passed after the first of these four, unless the candidate has obtained honours in some other Tripos, in which case eleven complete terms may have passed.

The names of the candidates who obtain honours are placed in three classes, each class consisting of one or more divisions arranged in alphabetical order.

The subjects of the second part of the examination fall into two groups:—(A) Metaphysics, Political Philosophy, Ethics—on each of which there is one paper—and (B) the following special subjects, History of Philosophy, Advanced Logic and Methodology, Advanced Psychology and Psychophysics, Advanced Political Economy. There are two papers on each of these special subjects besides an Essay paper containing questions on all the above subjects. Every student must take one, and may not take more than two, of the special subjects; also every student must take the papers on Metaphysics and Ethics except those who select Advanced Political Economy as a special subject: for such students the paper on Political Philosophy is provided as an alternative for Metaphysics.

A candidate for honours in this part must have already obtained honours in Part I. or in some other Tripos: he must also be in his eighth term at least, having previously kept seven terms; but twelve complete terms must not have passed after the first of these seven.

The names of the candidates who pass are placed in three classes arranged in alphabetical order. No candidate will be refused a first class on the ground that he has taken up only one special subject provided that his work reaches the first class standard in the compulsory subjects and his special subject taken together. In the case of every student who is placed in the first class, the class list will shew by some convenient mark (1)

the subject or subjects for which he is placed in that class, and (2) in which of those subjects, if in any, he passed with special distinction.

The following schedules of the different subjects, with lists of books recommended for study, was issued by the Special Board for Moral Science on June 17, 1889.

SCHEDULE OF THE SUBJECTS OF EXAMINATION IN
PART I. OF THE MORAL SCIENCES TRIPOS.

I. *Psychology.*

I. Standpoint, data, and methods of Psychology. Its fundamental conceptions and hypotheses. Relations of Psychology to Physics, Physiology, and Metaphysics.

II. General analysis and classification of states of mind. Attention, consciousness, self-consciousness. Elementary psychological facts: impressions, feelings, and movements; retentiveness, arrest, association; appetite and aversion; reflex action, instinct, expression of feeling.

III. Sensation and perception. Intensity, quality, and complexity of sensations. Physiology of the senses. Activity and passivity of mind. Localisation of sensations. Psychological theories of time and space. Intuition of things.

IV. Images. Imagination, dreaming, halluci-

nation. Flow of ideas. Interaction of impressions and images. Memory, expectation, obliviscence.

V. Thought. Comparison, abstraction, generalisation: formation of conceptions. Psychology of language. Influence of society upon the individual mind. Judgment. Psychological theories of the categories.

VI. Emotions: their analysis and classification. Higher sources of feeling: æsthetic, intellectual, social and moral. Theories of emotional expression.

VII. Voluntary action; its different determining causes or occasions, and their operation: Pleasure, pain, desire, aversion, and their varieties: will and practical reason: conscience, moral sentiments, moral perception or judgment, moral reasoning. Conflict of motives, deliberation, self-control. The origin of the moral faculty.

List of books recommended on this subject:

Sully, *Outlines of Psychology*.

Bernstein, *The Five Senses of Man*.

Bain, *The Emotions and the Will*.

Ward, *Psychology*, Article in the *Encyclopædia Britannica*, ninth edition.

The following books should also be consulted:

Bain, *The Senses and the Intellect*.

Dewey, *Psychology*.

Höfdding, *Psychologie in Umrissen*.

Ladd, *Elements of Physiological Psychology*.

Lotze, *Microcosmus*, Vol. 1.

Spencer, *Principles of Psychology*.

II. *Logic and Methodology.*

I. Province of Logic, formal and material.

II. Logical functions of language: names, and their kinds: formation of general notions: definition, division, and classification: predicables and categories: scientific nomenclature and terminology.

III. The fundamental laws of thought, and their application to logical processes.

IV. Propositions and their import: opposition and conversion of propositions.

V. Analysis and laws of syllogism.

VI. The nature of the inductive process: ground of induction: connexion between induction and deduction: analogy.

VII. Uniformities of nature, and their combinations: their analysis, and the methods of discovering and proving them: observation and experiment: scientific explanation: the nature and uses of hypothesis: doctrine of chance.

VIII. Error, its nature and causes, and the safeguards against it: classification of fallacies.

List of books recommended on this subject:

Whately, *Logic*.

Keynes, *Formal Logic*.

Mill, *Logic*.

Jevons, *Principles of Science*.

The following books should also be consulted :

Bacon, *Novum Organon*.

Drobisch, *Neue Darstellung der Logik*.

Mill, *Examination of Hamilton*, Chapters 17 to 24.

Whewell, *Novum Organon Renovatum*.

Ueberweg, *System of Logic*.

III. *Political Economy*.

I. Preliminary.

The fundamental assumptions of Economic Science, the methods employed in it, and the qualifications required in applying its conclusions to practice; its relation to other branches of Social Science.

II. Production of Wealth.

Causes which affect or determine

- (i) The efficiency of capital and of labour.
- (ii) The difficulty of obtaining natural agents and raw materials.
- (iii) The rate of increase of capital and population.

III. Exchange and Distribution of Wealth.

Causes which affect or determine

- (i) The value of commodities produced at home.
- (ii) The rent of land.
- (iii) Profits and wages.
- (iv) The value of currency.
- (v) The value of imported commodities.

Monopolies. Gluts and crises. Banking, and the foreign Exchanges.

IV. Governmental Interference in its economic aspects. Communism and Socialism.

The principles of taxation: the incidence of various taxes: public loans and their results.

List of books recommended on this subject.:

Marshall, *Economics of Industry*.

Walker, *The Wages Question*, and *Land and its Rent*.

Mill, *Principles of Political Economy*, Books III. and V.

Jevons, *Money and the Mechanism of Exchange*.

Sidgwick, *Principles of Political Economy*, Introduction and Book III.

Fawcett, *Free Trade and Protection*.

The following books should also be consulted :

Bagehot, *Lombard Street*.

Bastable, *Foreign Trade*.

Farrer, *Free Trade and Fair Trade*.

Giffen, *Essays in Finance*, Second Series.

Nicholson, *Money and Monetary Problems*, Part I.

Rae, *Contemporary Socialism*.

Sidgwick, *Principles of Political Economy*, Books I. and II.

SCHEDULE OF THE SUBJECTS OF EXAMINATION IN PART II. OF THE MORAL SCIENCES TRIPOS.

A.

I. (a) *Metaphysics*.

I. Knowledge, its analysis and general characteristics: material and formal elements of

knowledge ; self-consciousness as unifying principle ; uniformity and continuity of experience.

II. Fundamental forms of the object of knowledge : difference, identity ; quantity, quality, relation ; space and time ; unity, number ; substance, change, cause, activity and passivity ; &c.

III. Certainty, its nature and grounds : sensitive, intuitive and demonstrative certainty ; necessities of thought ; "inconceivability of the opposite" ; verification by experience.

IV. Criteria applicable to special kinds of knowledge : matters of fact and relations of ideas ; logical and mathematical axioms ; fundamental assumptions of physical science : causality, continuity, conservation of matter and of energy.

V. Sources and limits of knowledge : Empiricism, Rationalism, Transcendentalism ; relativity of knowledge, its various meanings and implications ; distinction of phenomena and things *per se* ; the conditioned and the unconditioned, the finite and the infinite.

VI. Coordination of knowledge : mechanical and dynamical theories of matter ; evolution ; physical and psychical aspects of life ; province of teleology ; relation of mind and matter ; relation of the individual mind to the universe ; problem of the external world ; Materialism, Idealism, Dualism ; relation of theoretical and practical philosophy.

I. (b) *Politics.*

I. Definition of State : general relation of the individual to the State and to Society : connexion of Law with Government in modern states : general view of functions of government : grounds and limits of the duty of obedience to government.

II. Principles of Legislation in the modern state : right of personal security : rights of property : contract and status : family rights : bequest and inheritance : prevention and reparation of wrongs : theory of punishment : governmental rights : grounds and limits of governmental interference beyond the making and enforcement of laws : principles of taxation.

III. External relations of states : principles of international law and international morality : war, and its justifications : expansion of states, conquest and colonization : relation of more civilized societies to less civilized.

IV. Distribution of the different functions of government in the modern state : legislative, executive, and judicial organs, their mutual relations, and their modes of appointment : relation of the state to other associations of its members : sovereignty : constitutional law and constitutional morality : constitutional rights of private persons : central and local government : federal states ; government of dependencies.

V. A general historical survey of (a) the

development of Law and Government, (b) the chief variations in the form and functions of government in European communities, (c) the relations of these variations to other social differences and changes.

II. *Ethics.*

I. Analysis of the moral consciousness ; moral sentiment, moral perception, moral judgment, moral intuition, moral reasoning : object of moral faculty ; voluntary action, motives, intentions, dispositions, habits, character : freedom of will and determination by motives.

II. The end or ends of rational action, ultimate good : the standard of right and wrong action : moral law : moral obligation : evil, moral and physical : interest and duty : virtue and vice : moral beauty and deformity : happiness and welfare, private and universal : pleasure and pain, qualitative and quantitative comparison of pleasures and pains : perfection, moral and physical, as rational end.

III. Exposition and classification of particular duties and transgressions, virtues and vices : different types of moral character : principles of social and political justice.

IV. Relation of Ethics to Metaphysics, Psychology, Sociology and Politics.

B. SPECIAL SUBJECTS.

III. *History of Philosophy.*

A special subject in the History of Philosophy will be announced in the Easter Term next but one preceding that in which the examination is to be held. Students will also be required to have a general knowledge of the History of Philosophy.

IV. *Advanced Psychology and Psychophysics.*

A fuller knowledge will be expected of the subjects included in the schedule for Part I., and of current controversies in connexion with them. Further, a special knowledge will be required (i) of the physiology of the senses and of the central nervous system, (ii) of experimental investigations into the intensity and duration of psychical states, and (iii) of such facts of mental pathology as are of psychological interest. Questions will also be set relating to the philosophic treatment of the relation of Body and Mind as regards both the method and the general theory of psychology.

V. *Advanced Logic and Methodology.*

Students will be expected to shew a fuller knowledge of the subjects included in the schedule for Part I., and of current controversies in con-

nexion with them, and the examination will also include the following subjects:—Symbolic Logic, Theory of Probabilities, Theory of Scientific Method, Theory of Statistics.

VI. *Advanced Political Economy.*

Students will be expected to shew a fuller and more critical knowledge of the subjects included in the schedule for Part I. The examination will also include the following subjects; the diagrammatic expression of problems in pure theory with the general principles of the mathematical treatment applicable to such problems: the statistical verification and suggestion of economic uniformities: and a general historical knowledge (*a*) of the gradual development of the existing forms of property, contract, competition and credit; (*b*) of the different modes of industrial organization; and (*c*) of the course and aims of economic legislation at different periods, together with the principles determining the same.

REMARKS ON THE ABOVE SCHEDULES.

Students will probably find it best to begin with Political Economy and Logic. The undisputed evidence which a large portion of Logic possesses peculiarly adapts it for beginners: and the principles of Political Economy, while they

can be grasped with less effort of abstraction than those of Philosophy, also afford greater opportunity of testing the clearness of the student's apprehension by their application to particular cases.

Accordingly, in the particular suggestions which follow as to the method of study to be adopted in the different departments respectively, we may conveniently take the subjects in the following order: Logic and Methodology, Political Economy, Psychology¹, Metaphysics, Politics, Ethics, and History of Philosophy. Care has been taken to distinguish the recommendations addressed to students who only aim at the more elementary or more general knowledge which will suffice for Part I., from those which relate to the more full and detailed knowledge—either of the subjects themselves or of the history of doctrine relating to them—which is required in Part II.

1. *Logic and Methodology.*

There are important differences in the range of meaning with which the term Logic is used. In its widest signification, it includes two departments of inquiry which may be to some extent studied independently of each other. The first of these,—to which alone the name Logic was formerly applied, and which still, according to some

¹ To avoid repetition the reading in these subjects for both parts is included under one head.

writers, should be regarded as constituting the whole of Logic,—is concerned with reasonings only in so far as their validity can be determined *a priori* by the aid of laws of thought alone.

This study is often called, for distinction's sake, 'Formal Logic;' on the ground that it is concerned with the *form* and not with the matter of thought; *i.e.* not with the characteristics of the particular objects about which the mind thinks and reasons, but with the manner in which, from its very nature, its normal thoughts and reasonings about them are constructed. It is with this branch that the student should commence, familiarising himself with it by the aid of some elementary hand-book, *e.g.* Jevons's *Elementary Lessons in Logic*, or Fowler's *Deductive Logic*.

He should then take Keynes's *Formal Logic* as his text-book, consulting other works on the subject when he finds them there referred to, and, in particular, working out a good number of the examples and problems that are set.

The latter portion of Jevons's *Lessons* or Fowler's *Inductive Logic* may serve as an introduction to Mill's *Logic* for those who shrink from facing Mill's two volumes at once. This work has a much wider scope than that of Formal Logic, as above explained; and in fact deals at length with topics that do not so properly belong to Logic—even according to Mill's own definition of Logic—as to Methodology, or the theory of the intellectual processes by which the truths of the different

sciences have been reached in the past, and may be expected to be reached in the future. It should be observed also that even when Mill is apparently discussing the same topics as those discussed by the formal logicians, he will often be found to treat them in quite a different spirit, and from a different point of view. A clear apprehension of this difference can only be attained in the course of the study itself: but it is well that the student should be prepared for it at the outset. The greater portion of Jevons's *Principles of Science* is devoted to the description and analysis of the methods of the physical sciences, and contains an almost unique collection of interesting and valuable scientific illustrations. Dr Venn's *Empirical Logic*, published since the schedule was issued, should be read carefully either along with or after these works by Mill and Jevons. Whewell's *Novum Organon Renovatum* should be consulted in connexion with Mill's *Logic*. It deals more distinctly and explicitly with the methodological topics treated of in Mill's book: and the student's grasp of the subject will be materially aided by a careful comparison of the doctrines of the two writers.

The majority of the more advanced works fall into two sections: those which are read mainly for their own historic interest or the historic information which they contain; and those which require some knowledge of mathematics or physical science, as analysing the methods, or appealing to the notation of, those sciences. In the former

class Bacon's *Novum Organon* claims attention from its importance in the development of English scientific speculation. The best brief introduction to it is still to be found in the essay by R. L. Ellis, in the first volume of the collected works of Bacon by him and Mr Spedding. Much valuable information and criticism is also given in Professor Fowler's very complete edition of the *Novum Organon*. Ueberweg's *System of Logic* is valuable to the English reader for its abundant historic references, and because it presents him with a general view of the science familiar on the continent but not readily to be gained from the ordinary English hand-books.

The student is recommended to read the logical parts of Mill's *Examination of Hamilton*, less for their destructive side, in the way of criticism of Hamilton, than for the many points on which they serve to supplement Mill's own system of Logic, and to explain the philosophic scheme which underlies that system.

Many of the advanced books on Logic which it is usual to study for the second part of the Tripos deal largely with questions pertaining to Metaphysics as described in the schedule. Among books of this class probably the Logics of Lotze and of Sigwart will furnish the best basis of study: the former is already translated and a translation of the latter is in progress. To the same class—Higher Logic it is sometimes called—belong Bradley's *Principles of Logic* and Bosanquet's

Logic or Morphology of Knowledge, both of which deserve perusal.

Dr Venn's *Symbolic Logic* may be taken as the best introduction to that subject and the corresponding parts of Boole's *Laws of Thought* and Jevons's *Principles of Science* may be studied in connexion with it. A great deal has been written on this form of Logic within the last few years and the student will find a full bibliography in Schröder's *Vorlesungen über die Algebra der Logik*, Band i. 1890.

Dr Venn's *Logic of Chance* may serve in like manner as an introduction to the Theory of Probabilities and the Theory of Statistics. It aims at being within the comprehension of those who have only an elementary knowledge of mathematics. Two of the best books dealing specially with statistics are Maurice Block, *Traité théorique et pratique de statistique* 1878, and Georg Mayr, *Die Gesetzmässigkeit im Gesellschaftsleben* 1877.

In addition to the books already mentioned on the subject of Higher Logic and Method the two large volumes by Wundt—*Logik: Erkenntnisslehre; Logik, Methodenlehre*—may be consulted and will serve to introduce many other books dealing with special questions to the notice of the student.

2. *Political Economy.*

Of the books included in the syllabus drawn up by the Board, Mill's *Principles of Political*

Economy and Sidgwick's *Principles of Political Economy* alone cover the whole ground as defined by the schedule for Part I. of the Moral Sciences Tripos. It will be observed, however, that only Books III. and v. of the former are recommended, and that only a portion of the latter is included in the list of works which all candidates are expected to study in detail. The reason for this, so far as Mill is concerned, is the recognition that substantial corrections are required in his general theory of Distribution. The need of such corrections was, indeed, admitted by Mill himself some time before his death ; but he never faced the task of rewriting his treatise from the new point of view which he had gained. Nevertheless if the student will remember that many of the positions taken up require important modifications, he will do well to begin with a perusal of Mill's work in order to obtain a first general survey of the subject. Professor Sidgwick's treatise is more difficult, and should therefore be taken at a somewhat later stage.

Assuming that Mill has been read so as to gain a general idea of the ground to be covered, but without any considerable amount of attention having been paid to points of detail, the student should seek thoroughly to master Marshall's *Economics of Industry*. This work should be supplemented by Walker on the *Wages Question* and on *Land and its Rent*. Here and elsewhere the differences of view between the authors read should be carefully noted and thought over. The student

will find it specially useful to make a critical comparison of the theories of wages and profits laid down by Mill, Marshall, and Walker, observing both their points of resemblance and their points of difference.

The study of the general theory of Distribution and Exchange may later on be completed, so far as Part I. of the Tripos is concerned, by a careful study of Marshall's *Principles of Economics*, Vol. I., and of the corresponding portions of Sidgwick's *Principles of Political Economy*. Attention may be specially called to the part played by the principle of Continuity in the former work, and to the recognition by both writers of the complicated interactions between economic phenomena, which render it impossible to sum up in cut-and-dried formulas the conclusions ultimately reached.

Passing to the subject of currency and banking, the student should read Jevons's *Money and the Mechanism of Exchange* and Nicholson's *Money and Monetary Problems*, Part I., which usefully supplement one another. The former is mainly of a descriptive character, while the latter deals with the more difficult problems relating to the principles that regulate the value of money. Bagehot's *Lombard Street* treats of the English banking system with special reference to the position of the Bank of England in the London Money Market. The above may be supplemented by Walker's *Money, Trade, and Industry*, and by the corresponding chapters of Sidgwick.

The subject of international values and allied topics may be studied in Bastable's *Theory of International Trade*. Goschen's *Foreign Exchanges* is in some respects difficult, but it should on no account be omitted; it will give the student a fuller grasp of facts, the apprehension of which is of fundamental importance both for the theory of foreign trade and for the theory of money. Giffen's *Essays in Finance*, Second Series, may be read with advantage at about this point.

Passing from economic science in the stricter sense to its applications, and considering Government interference in its economic aspects and the principles of taxation and State finance, Mill, Book v. should be supplemented by Sidgwick, Book III. A study of Professor Sidgwick's method will afford the student a most valuable training in the philosophic treatment of practical questions.

Some of Macmillan's *English Citizen Series* may here be consulted; e.g., Wilson's *National Budget*, Fowle's *Poor Law*, and Jevons's *State in relation to Labour*. The subject of Free Trade and Protection is treated in detail, from the Free Trade standpoint, in Fawcett's *Free Trade and Protection* and in Farrer's *Free Trade versus Fair Trade*. Current socialistic doctrines will be found fully described and criticized in Rae's *Contemporary Socialism*. The student will learn much from following the economic movements of his own time; but he must be cautioned against giving undue attention to controversial questions of the

day, such as bimetallism, socialism, &c. Time may thus be occupied, which should be given to systematic study of the foundations of the science.

The scope of Political Economy, the methods employed in it, and its relations to other sciences, are treated of in Marshall's *Principles of Economics*, Book I., and in Sidgwick's Introduction. Cossa's *Guide to the Study of Political Economy* and Keynes's *Scope and Method of Political Economy* may also be consulted.

It would be out of place here to attempt to give detailed advice to students taking Advanced Political Economy in Part II. of the Tripos. They may be warned, however, of the importance of not neglecting to go over again more than once the ground they have already covered. They will thus familiarise themselves with the general principles of economic reasoning, and will know how to set about the solution of any new and complex problem that may be placed before them. In particular they should return again and again to the more difficult parts of Marshall and Sidgwick, and—in connexion with the former—should study the application of symbolic and diagrammatic methods to Economics. From this point of view Cournot's *Principes Mathématiques de la Théorie des Richesses* and Jevons's *Theory of Political Economy* should be read. Some of Jevons's doctrines are expounded with great lucidity in Wicksteed's *Alphabet of Economic Science*, and this book may be specially recommended to those students

whose mathematical reading is not so far advanced as to render needless an elementary exposition of the conceptions upon which the Differential Calculus is based. A critical study of Ricardo's *Principles of Political Economy* and of his Tracts on Money must not be omitted ; while in order to obtain some knowledge of recent developments of theory by his latest critics—the economists of the Austrian school—reference may be made to Böhm-Bawerk's *Capital and Interest* and *Positive Theory of Capital*, the former of which is however open to the charge of doing less than justice to the writer's predecessors.

Every student of Economics ought to read at least some portions of the *Wealth of Nations*, Professor Nicholson's edition of which, with Introduction and notes, may be recommended. Many real and fundamental divergences from modern theory will be observed, especially in Books I. and II. ; but Adam Smith is generally stimulating and instructive even when the doctrines which he lays down need correction. As regards the course of economic history, especially the course and aims of economic legislation at different periods, Books III., IV., and V. are specially important. For further historical study choice may be made from the following: Ashley, *Economic History*; Cunningham, *Growth of English Industry and Commerce*; Maine, *Village Communities*; Seebohm, *The English Village Community*; Brentano, *On the History and Development of Gilds*; Gross, *The Gild Merchant*;

Rogers, *Six Centuries of Work and Wages*; Toynbee, *The Industrial Revolution*; Levi, *History of British Commerce*. Blanqui's *History of Political Economy in Europe* and Ingram's *History of Political Economy* may also be read; but it must be remembered that the latter is written from the point of view of the Comtist critic and is strongly partisan. The use of statistics in Economics may be studied in Jevons's *Investigations in Currency and Finance* (edited by Professor Foxwell) and in both series of Giffen's *Essays in Finance*.

A long list of useful books on various departments of Political Economy might here be added, but it must suffice specially to mention the collected Essays of J. S. Mill, Bagehot, Cairnes, and Cliffe Leslie. Portions of the following may be consulted in libraries on particular points: Eden, *State of the Poor*; Porter, *Progress of the Nation*; Tooke and Newmarch, *History of Prices*; Schönberg, *Handbuch der politischen Oekonomie*.

3. *Psychology.*

The Science of Psychology has made considerable advances in recent times; so that the work of earlier English writers on this subject—including even Locke—has now chiefly a historic interest. Still the student must not expect to find a perfectly clear *consensus* among its expositors as to its method and principles. Modern Psychology though rich in facts, is poor in definitions; and the greater

part of its laws are merely empirical generalisations still awaiting further explanation.

The great difficulty in attempting to prescribe a course of reading in Psychology is to avoid repetition and what is worse—a bewildering divergence of opinion at least as regards details. There is now an English translation of Höffding's *Outlines* and with this or with Dewey's *Psychology* the student had better begin. He may then read Sully's *Outlines* and Bain's works as supplementary to his first text-book. The article *Psychology* in the ninth edition of the *Encyclopædia Britannica* is most likely to be of service to him when he feels the need of getting his psychological knowledge into more scientific form.

Psychophysics, which treats of the phenomena of mind in relation to the changes in the organism which accompany them, is a branch of Psychology to which every one who studies this subject at all, must give some attention. Here, however, we have to distinguish between the philosophical discussion of the general relation of mind and body, and a knowledge of the particular connexions between mental and corporeal phenomena. The former subject belongs rather to Metaphysics; an elementary knowledge of the latter may be gained from Prof. Ladd's *Outlines of Physiological Psychology* which has just appeared and may be taken to supersede his larger *Elements*: it will also probably enable the student to dispense with Bernstein's *Five Senses of Man*.

The advanced student of Psychology will find it a great advantage if he is able to read German. In this case Volkmann's *Lehrbuch der Psychologie* will be most useful to him as a repertory of facts and opinions, besides giving the ablest exposition of the Herbartian Psychology—the Psychology which has been the most fruitful of results, at any rate in Germany. Closely related to this school is the teaching of Lotze, which should on no account be passed over: one section of his *Metaphysik*¹ is devoted to psychological questions. His *Medicinische Psychologie*, long out of print and very scarce, is still worth attention: a portion of it has recently appeared in French. Drobisch's *Empirische Psychologie* and Waitz's *Grundlegung*, and *Lehrbuch der Psychologie* are works to which the student who is not pressed for time should also pay some attention. Morell's *Introduction to Mental Philosophy on the Inductive Method*, is avowedly largely indebted to Waitz, Drobisch and Volkmann. It may be recommended especially to the English student who is unacquainted with German; also Ribot's *La Psychologie allemande contemporaine*, which contains fair summaries of the leading doctrines of Herbart, Fechner, Lotze, Wundt and others.

In the two large volumes of Prof. William James, *Principles of Psychology*, the advanced student has the means of forming an ample ac-

¹ There is an English translation of this published by the Clarendon Press.

quaintance with existing doctrine and current controversies. From Wundt's *Grundzüge der physiologischen Psychologie* (3rd ed. 1887: French translation of the 2nd ed. 1880) the same help may be obtained as regards Experimental Psychology¹. But the special knowledge required concerning the central nervous system will be got better from Dr Foster's *Text-book of Physiology*, 5th ed. Parts III. and IV. There is no single book giving such facts of mental pathology as are of psychological interest. This is a department to which the French have especially devoted themselves. The following works may be mentioned:—Janet (Pierre), *L'automatisme psychologique*; Ribot, *Les Maladies de la Mémoire*; *Les Maladies de la Volonté*; *Les Maladies de la Personnalité*. Several of Ribot's books are to be had in English.

Many works have recently appeared on what might be called Comparative Psychology. The subject is one that it is difficult to lift above the level of anecdote, but none the less it deserves attention. Romanes' *Mental Evolution* (2 vols.) and Prof. Lloyd Morgan's *Animal Life and Intelligence* will be found interesting in this department of psychology.

The origin of language and the connexion of

¹ There is now (1891) some prospect of a Psychophysical laboratory in Cambridge. Prof. Foster has already set apart a room for the purpose and the University has made a small grant towards the purchase of apparatus. Some instruments too have been given by private donors.

thought and language form an important chapter of psychology and are dealt with in special works, in most of which, however, either the psychology or the philology leaves much to be desired. A general oversight of theories will be found in Marty, *Ueber den Ursprung der Sprache*. Max Müller's *Science of Thought*, Egger's *La Parole intérieure*, and Steinthal's *Einleitung in die Psychologie und Sprachwissenschaft* are noteworthy.

4. *Metaphysics.*

The student who has already gone through a course of reading—accompanied, it is to be hoped, by oral instruction—in Psychology, will already have had his attention directed to some extent to the topics included in the schedule of Metaphysics. That this must be the case will appear, indeed, from a comparison of the two schedules of Psychology and Metaphysics respectively, independently of the books recommended. Thus it would be impossible to treat of the “data and fundamental conceptions” of Psychology, of “perception,” “intuition of things,” or “thought and abstraction,” without at the same time discussing to a certain extent the “nature and origin of knowledge” and the “relation of the individual mind to the universe,” &c.

But the principle of the separation adopted in the Cambridge scheme may perhaps be made partially clear without entering on matters of

controversy ; and it will probably assist the student to keep it in view from the outset. He must understand then, that Psychology deals with cognitive acts or states primarily as one class (among others) of mental phenomena ; as forming part of the stream of consciousness of certain particular minds, whose processes the student is able to observe directly or indirectly. Whereas in the investigation of knowledge and its conditions that constitutes one department of Metaphysics, the same acts or states are primarily considered as representative of or related to the objects known. Or—to present substantially the same difference in another form—in investigating perceptions or thoughts from the point of view of Psychology we are no more occupied with those that are *real* or *valid*, than with those that are illusory or invalid—in fact, the latter may often be more interesting as throwing more light on the general laws of human minds: whilst as metaphysicians we are primarily concerned with real knowledge or truth as such, and treat of merely apparent knowledge or error only in order to expose and avoid it.

Under the head of Metaphysics it is intended to require a general knowledge (1) of what is coming to be called Epistemology and (2) of the speculative treatment of the fundamental questions concerning Nature and Mind prevalent at the present time, without direct reference to the History of Philosophy. Still it can scarcely be

denied that the student who purposes to take up the History of Philosophy as a special subject will find some acquaintance with this history a help to the understanding of Philosophy in its most recent phases. If for no other reason this will be found true from the simple fact that nearly every writer on philosophical problems assumes some familiarity on the part of his readers with the writings of his predecessors. In particular those who are taking up both subjects and have to begin their work in private—during the Long Vacation, for instance—will find it advantageous to take up certain parts of the general history before attempting to do much at Metaphysics as outlined in the schedule, and especially to take up those parts of it that relate to the Theory of Knowledge. For these at least a general acquaintance with Hume and Kant will be helpful. Still those who are meaning to specialise in other directions can begin without this preliminary study of the history, and may reasonably count on getting what they need in this respect from lectures. Such may read some brief exposition of the Kantian philosophy, the three constructive chapters in Mill's *Examination of Hamilton* (entitled Psychological Theory of Matter, Mind &c.), Mr Herbert Spencer's *First Principles* and Lotze's *Metaphysics*, as a preparation for lectures. Those familiar with German will find Riehl's *Philosophische Kritikismus*, Kroman's *Unsere Naturerkenntniss* and Wundt's *System der Philosophie* useful books.

5. *Politics.*

The student will find all the aspects of this subject most fully dealt with in Dr Sidgwick's *Elements of Politics*. This work is written from the Utilitarian point of view: the following books written from the same general standpoint may be read along with it:—Mill's *Utilitarianism*, Chap. v., and *Representative Government*, Bentham's *Principles of Morals and Legislation*, *Principles of the Civil Code* and *Fragments on Government*, and Austin's *Jurisprudence*. For a treatment of the subject from a different point of view, the student may be recommended to read Green's Lectures on Political Obligation (in the 2nd volume of his *Collected Works*); also Ritchie's *Principles of State Interference*. Mr Herbert Spencer's writings may also be profitably consulted, especially his *Sociology*, Part II. and Part v., and his volume on *Justice*.

The following works will be found useful for occasional reference—Bluntschli, *Lehre vom modernen Staat*, Vol. I. (authorised English translation published by the Clarendon Press), Maine's *Ancient Law*, *Early History of Institutions*, and *Popular Government*, Stephen's *English Thought in the Eighteenth Century*, Spencer's *Man versus the State*, Dicey's *Law of the Constitution*, Bryce's *American Commonwealth*, Stirling's *Philosophy of Law*, Hume's *Essays*, II.—IX., and XII., Locke's *Essay on Civil Government*, &c.

To those who have time and inclination to go beyond the limits of the schedule and study the history of the subject Janet's *Histoire de la Science Politique* may be recommended. But some acquaintance with the original works of the more important writers is desirable—e.g., the *Republic* and *Laws* of Plato, the *Ethics* and *Politics* of Aristotle, Hobbes's *Leviathan*, Montesquieu's *Esprit des Lois*, Rousseau's *Contrat Social*, Burke's *Thoughts on the Present Discontents* and *Reflections on the Revolution in France*, Hegel's *Rechtsphilosophie* and *Philosophy of History*, Comte's *Philosophie Positive*, Part VI. *Physique Sociale*, (Vol. II. of Miss Martineau's Translation), and *Politique Positive* (translated by various writers). Students ought not, however, to attempt to master the details of any of these works. On Comte, Caird's *Social Philosophy of Comte* will be found useful.

6. *Ethics.*

Every student will naturally desire to have from the first a clear idea of the scope of the science. Unhappily there is no book from which such an idea can be gained in a quite satisfactory manner: for the degree of emphasis which is laid on different questions, and even to some extent the nature of the questions themselves, vary considerably in the different schools of ethical thought. A general sketch of the topics discussed by modern ethical writers may be found in such a book as

Dewey's *Outlines of Ethics*. But the significance of the various questions can hardly be fully appreciated without some reference to the history of the subject. It would be well therefore to read ch. iv. of Dr Sidgwick's short *History of Ethics* at an early stage. This book is almost entirely limited, in the modern parts, to the history of English thought; but this deficiency may easily be corrected as the student proceeds with his work.

After having in this way acquired a general idea of the subject, the student may proceed to consider, more in detail, the various points of view from which the subject has been approached. He will soon find that the main schools of ethical thought group themselves naturally under the following heads:—(1) Intuitional, (2) Utilitarian, (3) Evolutionist, (4) Idealistic. As the student advances, he may be led to see that the distinction between these schools is not an absolute one, and that to a considerable extent their views overlap. But at first it may be convenient to study them separately. As representative of the Intuitional theory, the student may read the part of Martineau's *Types of Ethical Theory* which contains the statement of the writer's own doctrine—*i.e.* especially Part II., Book I., and perhaps the chapters on Intuitionism in Calderwood's *Handbook of Moral Philosophy*; while, as representative of the Utilitarian point of view he may take Mill's *Utilitarianism*, together with the criticism and further development of Mill's ideas in Dr Sidg-

wick's *Methods of Ethics*. The criticisms of Intuitionism in Dr Sidgwick's *Methods of Ethics* and of Utilitarianism in Green's *Prolegomena to Ethics* and in Sorley's *Ethics of Naturalism* ought also to be studied in this connexion. With reference to Evolutionist Ethics, Mr Herbert Spencer's *Data of Ethics* ought to be carefully studied, while those who have time may consult in addition such books as Mr Leslie Stephen's *Science of Ethics*, Mr Alexander's *Moral Order and Progress*, and Höffding's *Ethik*. For criticism of the Evolutionist Ethics, reference may be made to Green's *Prolegomena to Ethics*, Sidgwick's *Methods of Ethics*, and Sorley's *Ethics of Naturalism*. The Idealistic Ethics rests primarily on the teaching of Kant, and the best introduction to it may be found in his *Metaphysic of Morals* (of which Abbott's translation is the most accurate). Dewey's *Outlines of Ethics* are also written from this point of view. So are Bradley's *Ethical Studies* and Green's *Prolegomena to Ethics*; but only certain portions of these books can be studied with advantage by those who are not at the same time studying Metaphysics. The most complete exposition and criticism of Kant's ethical position is to be found in the 2nd volume of Caird's *Critical Philosophy of Immanuel Kant*. Among recent books Paulsen's *System der Ethik* is singularly rich and suggestive.

Students who are reading Metaphysics in conjunction with Ethics will naturally bestow more

attention on the fundamental difficulties of the subject than other students can be expected to give. On this, as on other aspects of Philosophy, the works of Kant will necessarily be studied with care. Green's *Prolegomena to Ethics* may be strongly recommended as the most important English book dealing with the relation of Metaphysics to Ethics. Few students will find time to acquire more than a general knowledge of such speculations as those of Plato, Spinoza, and Hegel.

Students of Politics, on the other hand, may be expected to be especially interested in the relations of Ethics to the Philosophy of society and of the state. Among modern writers, the Germans have devoted most attention to this aspect of the subject, from Hegel's *Rechtsphilosophie* onwards. Paulsen's *System der Ethik* may be recommended; also Höffding's *Ethik*, translated from the Danish. In English, Green's *Prolegomena to Ethics* and *Lectures on Political Obligation* (in the 2nd volume of his *Collected Works*) may be consulted. Several writers of the Utilitarian school have also dealt with this subject. Bentham's *Principles of Morals and Legislation* and *Principles of the Civil Code* will be found interesting; and highly instructive discussions of various aspects of the subject are to be found in Dr Sidgwick's *Methods of Ethics*, *Principles of Political Economy*, and *Elements of Politics*.

7. *History of Philosophy.*

A particular portion¹ of the whole subject will be selected from time to time, which the student will be required to know thoroughly: and he should endeavour to avail himself of this special knowledge so as to make his general survey of the course of metaphysical speculation, in ancient or modern times, less superficial than it would otherwise be; by keeping prominently in view the connexion of the doctrines specially studied with antecedent and subsequent thought.

There are no good general histories of Philosophy by English writers, but there are translations of several standard histories by Germans. Of these Schwegler's, though very brief, is good for a general survey. Erdmann is fairly full and would be excellent if not obscured in parts by careless translation. Ueberweg attempts—in the style of Prof. Bain's *Ethical Systems*—to summarize in the writers' own words but not always with Prof. Bain's success.

The student should try, if possible, to read something of the philosophical classics at first hand. Such short works, for example, as Descartes' *Discourse on Method* or his *Meditations*, Berkeley's *Hylas and Philonous*, Hume's *Treatise of Human*

¹ The special subject selected for the examination in 1892 is, *The Philosophy of Kant*; and for 1893:—*European Philosophy from 1600 to 1660 with special reference to Descartes, Bacon and Hobbes.*

Nature, Vol. I., and Kant's *Prolegomena to every future metaphysic*, might be read.

Prof. Sidgwick's *History of Ethics* will be found the most useful text-book; and may be supplemented by Jodl's *Geschichte der Ethik*. Help will also be obtained from Mr Leslie Stephen's *History of English Thought in the Eighteenth Century*; Martineau's *Types of Ethical Theory*; the Introduction to the second volume of Hume's Works in the edition of Green and Grose (re-printed in the first volume of Green's *Collected Works*); and Wundt's *Ethik*, Abschnitt II.

GENERAL REMARKS ON METHOD AND TIME OF STUDY.

1. *Method of reading.*

Perhaps the best plan upon commencing a new work is to read it rapidly through first, in order to form a general notion of its bearing and to catch its principal points. The first reading may be too careful. The student may find himself face to face with difficulties, which, although really only of an incidental character, may cause him to misconceive the proportions of the whole, if he have formed a determination—in itself praiseworthy—to master every part upon first acquaintance. Upon the second reading, an analysis should be made of the more important works, but care should

be taken that it do not become long and wearisome : it should be distinctly of the nature of a summary, and not a mere series of extracts. Such analyses are almost indispensable, to enable the student to perform, in the concluding period of his course, an effective and systematic revision of the whole results of his study. Further, at the second time of reading, the student should take careful note of any difficulties that he may find in understanding the doctrines or criticisms propounded, or any doubts that may occur to him as to their correctness. He need not be afraid of losing time by writing down in his note-book as precise a statement as possible of his doubt or difficulty ; since no exercise of his mind is likely to be more conducive to his attaining a real grasp of his subject. He will sometimes find that the mere effort to state a difficulty clearly has the effect of dispelling it ; or, if not at the time, at any rate when he recurs to the point on a subsequent day he will often find the problem quite easy of solution : while in the cases where his perplexity or objection persists, a clear statement of it will generally bring his mind into the most favourable condition for receiving explanations from his teacher.

In subjects so full of unsettled controversy as the Moral Sciences generally are, a student must be prepared to find himself not unfrequently in legitimate disagreement with the authors studied ; (though he should not hastily conclude that this is the case, especially during the earlier stages of his

course). In all except quite recent books, he is likely to find some statements of fact or doctrine which all competent thinkers at the present day would regard as needing correction ; while in other cases he will find, on comparing different works, important discrepancies and mutual contradictions on points still debated between existing schools of thought. He should carefully note the results of such comparisons ; but he should not content himself with merely committing them to memory ; rather, he should always set himself to consider from what source each controversy arises, what its relation is to the rest of the doctrine taught in the works compared, and by what method the point at issue is to be settled.

It will generally be found convenient to put in tabular form any divisions or classifications which are met with in the books read. Such lists are not indeed necessarily of great importance in themselves, but they furnish a convenient framework for criticisms and comparisons of the methods and results of various writers.

The constant practice of writing answers to papers of questions and longer compositions on special points arising out of the subjects studied, cannot be too strongly urged. Many minds are hardly able to bring their grasp of subtle or complicated reasonings to the due degree of exactness and completeness, until their deficiencies in these respects have been brought home to them by exercises in written exposition.

2. *Time of study.*

A student who is in a position to begin effective work in his first term may hope to be prepared for Part I. of the Tripos in his second year, and may take Part II. at the end of his third, assuming, of course, in both cases that he does a reasonable amount of private study during Long Vacations. But it is desirable, when circumstances admit of it and especially if two of the special subjects are taken up, to devote not less than two years to the work of the Second Part.

Those who have taken honours in other Triposes at the end of their *second* year, will be able afterwards to prepare fully for either part of the Moral Sciences Tripos at the end of their *fourth* year, without being inconveniently pressed for time—supposing them to read steadily in their second, as well as in their third Long Vacation. If, however, the period entirely devoted to this preparation is only one year—as must be the case with students who take some other Tripos at the end of their *third* year—it is very desirable that some part of the subjects should have been read at an earlier stage of the course.

The Special Board for Moral Science publishes annually, towards the end of the Easter Term,

a list of lectures for the coming academical year in different departments of the Moral Sciences. These lectures are, generally speaking, so arranged as to provide all the oral instruction required by students at different stages of their course.

THE HISTORICAL TRIPOS.

MODERN HISTORY was from 1860 to 1869 one of the subjects of Examination in the Moral Sciences Tripos. In 1870 it was removed from that Tripos and inserted among the subjects of the Law Tripos, which thus became the Law and History Tripos. The combination of Law and History in one Tripos was not found to be in all respects satisfactory, and was not maintained beyond December 1874. In December 1875 two separate Examinations, one for the Law Tripos, the other for the Historical Tripos, were held for the first time.

The regulations for the Historical Tripos were considerably modified in 1885, and the first examination under the new regulations took place in 1889.

The present article will first state what are the subjects of the Historical Tripos Examinations; secondly, give some directions respecting the manner in which the student should arrange his reading; and, lastly, attempt to give some guidance in the choice of books.

I.

In the Historical Tripos Examination there are 10 papers, allotted as follows :

- | | | |
|-----|---|----------|
| (1) | The Constitutional History of England | 2 papers |
| (2) | The Economic History of Eng- land | 1 „ |
| (3) | Political Science | 1 „ |
| (4) | Special Subject (I) | 2 „ |
| (5) | (a) Special Subject (II) | 2 „ |
| | <i>or</i> | |
| | (b) Political Economy | 1 „ |
| | General Theory of Law and Government | } 1 „ |
| | International Law | |
| (6) | Subjects for Essays | 1 „ |
| (7) | Subjects for Essays on English History | 1 „ |

Of the above papers, those mentioned under (1), (2), (3), (6) and (7) are invariable, and are obligatory on all candidates. The Special Subjects vary from time to time. In each year four such subjects are set, of which the candidate must take up one. The papers under (5, a) and (5, b) are alternative. A candidate has the option of taking up either a second Special Subject (5, a), or the theoretical subjects included under (5, b).

To consider these subjects singly. In subject (1), questions may be asked on any part of the history of the English Constitution, from its origin

down to the present time. Questions on Constitutional Law are also included, but the subject is regarded, in this Tripos, rather from the historical than from the legal point of view. Passages from documents are frequently given for translation and comment, especially in the earlier portions of the subject. These will generally require some knowledge of Latin or medieval French.

(2) The paper on the Economic History of England contains questions on the history of English trade, industry and commerce; on colonial policy; on the distinctions of classes and the development of English Society in general; on the distribution of wealth and wages; on trade-organisation, and kindred subjects. Some knowledge of Political Economy being advantageous for the proper treatment of these matters, the paper includes questions requiring an elementary knowledge of this subject.

(3) Political Science is, for the most part, treated inductively in this paper. It is not, like the previous subjects, confined to England or the British Empire, but a wide survey, for the purpose of scientific comparison, is taken of the political institutions of the states of the ancient, medieval and modern world. The attention of the student is directed to the origin and development of political society and government in general, the nature of different forms of government and the conditions under which they tend to come into being, the mutual relations of the various portions

of the state-machine, and similar matters. The point of view is throughout historical rather than theoretical.

(4) and (5, *a*). The four Special Subjects are chosen from later Roman and early medieval history, later medieval, early modern, and later modern history respectively. They usually relate chiefly to the history of foreign countries, but there is nothing in the regulations to prevent their being taken from English history as well. The present practice is to change one of these subjects in each year, so that each subject remains on the list, as a rule, for four years. The following list will give an idea of their nature.

SPECIAL SUBJECTS FOR 1892.

- I. The Gothic Kingdom in Italy, A.D. 493—553.
- II. The German Kingdom, A.D. 919—1002.
- III. England under Elizabeth, with special reference to domestic history.
- IV. Europe during the reign of Frederick the Great, A.D. 1740—1786.

SPECIAL SUBJECTS FOR 1893.

- I. } as in 1892.
- II. }
- III. The reign of Louis XI, A.D. 1461—1483.
- IV. as in 1892.

SPECIAL SUBJECTS FOR 1894.

- | | | |
|------|---|-------------|
| I. | } | as in 1893. |
| II. | | |
| III. | | |

IV. The origin and course of the War of the Spanish Succession.

*Notice of these subjects is given in the Easter Term next but two before the Tripos in which they are to be set; for instance, the notice of the subjects to be set in 1894 was given in the Easter Term 1891. Candidates can thus commence the study of their Special Subjects immediately upon entrance, or even before entrance, if they wish to do so.

The chief aim of the Special Subjects is (1) to encourage accurate and detailed study, and (2) to inculcate the method of using original authorities. The subjects are therefore limited in extent, and a list of original and, so far as possible, contemporary authorities is published, in which the subjects are to be studied. Great stress is laid on the study of these authorities, one of the two papers set in each Special Subject being, as a rule, confined to questions upon, or arising out of the set books.

(5, b). The range of reading expected from those who take up Political Economy as an alternative subject is so wide, and the modern developments of the science are so many, that students who have already prepared for paper (2) will find

that this is a practically new subject, and that their reading for that paper gives them no substantial help.

The second paper under this head consists of two portions, half the questions being generally devoted to each subject. The theory of Law and Government includes an examination of the general conceptions on which Jurisprudence and Politics are or may be based, and the principles on which government, in a modern state, should be regulated. This paper differs from (3) in that the point of view is here rather theoretical than historical; but, as in the former paper it is neither possible nor desirable to exclude theory altogether, so in this some knowledge of general political history is requisite. Similarly, the study of International Law, though in the main legal, must be partially historical, and involves some acquaintance with the mutual relations of civilized states, as determined by treaty or otherwise, during the last three or four centuries.

(6) This paper contains a small number of subjects, not announced beforehand, on one of which the candidate has to write an essay within a limited time. The subjects are of a general nature, but will almost always be found to be connected with one or other of the divisions of the Tripos.

(7) In this paper subjects are set, connected with those branches of English History—including the history of Scotland, Ireland and the British

Empire in general—which are not dealt with under heads (1) and (2); that is, with the general political history of England, the history of the English Church, foreign policy, literature, art and architecture, &c.

II.

The order in which the student should arrange his reading is to a great extent determined by the order in which lectures are provided under the control of the Special Board for History, and by the Intercollegiate Examinations at the end of each academic year, for which he will probably be a candidate. These examinations are organised with the view not only of testing the student's progress, but also of directing the course of his studies. As at present arranged, the subjects which a student ordinarily takes up in his first year are

- (1) General English History¹.
- (2) The Economic History of England.
- (3) A Special Subject.

The subjects for the second year are

- (1) English Constitutional History to 1485.
- (2) Political Science.
- (3) A second Special Subject ;

or

Political Economy ;

¹ A paper of essays on this subject (answering to paper (7) in the Tripos) is set in the first-year examination.

or

The theory of Law and Government,
with International Law¹.

In his third year the student will read

English Constitutional History (after 1485), and, if he chooses the subjects included under (5, *b*), (see above, p. 2) he will also read such of these as he has not taken in his second year. The rest of his time will be profitably spent in revising the subjects taken in the earlier part of his course.

The student's course of reading will naturally depend, to a large extent, on his state of preparation when he enters the University. It is highly desirable that he should have at least a general knowledge of English History before he comes up, and also that he should have obtained exemption from the Previous Examination or should pass that Examination at the earliest opportunity. A student who already knows his English History can at once set to work on more advanced subjects, but one who has not made himself master of it should begin by doing so, as it is the indispensable basis of a great part of his subsequent reading.

The choice of a Special Subject is a matter of great importance to the student. He should without delay consult his tutor or lecturers on this point. Advanced students may, if they please, attend lectures on a Special Subject in their first term. Those who have still to pass the Previous

¹ A paper of essays (answering to paper (6) in the Tripos) is also set in the second-year examination.

Examination can hardly do this, but the lectures are so arranged as to give such students facilities for commencing the study of their Special Subject in their second term.

One of the most important questions relative to his course of reading which the candidate will have to decide is whether he will take the papers included under (5, *b*) or a second Special Subject. There is no necessity, however, that this question should be decided till after the end of his first year, by which time he may be expected to have some idea whether his inclinations and capacity point rather in the direction of philosophical speculation or in that of historical enquiry pure and simple. On this matter he should carefully consult those who are responsible for the direction of his studies.

Lectures are provided on all the subjects of the Tripos, and on some subjects more than one course may be given. But students should not neglect to attend a course at the right time, in the hope of being able to take up the subject later on, for they may find themselves disappointed in this expectation, and will at all events discover that they have quite enough to do, without the addition of the subject previously omitted.

The student should, so far as possible, avoid reading more than two subjects at one time. To attempt more than this is liable to lead to confusion of mind and to prevent any subject being grasped thoroughly. If a student passes the

Previous Examination in his first term, and takes the Tripos subjects at their right time, he can always avoid this undesirable complication. It will generally be found advantageous to read one of the purely historical and one of the more theoretical subjects together. The strain on the memory is thereby relieved, and two sides of the mind, the capacity for acquiring facts and the capacity of generalising from them, are trained simultaneously.

Papers of questions are generally set by the lecturers on the subjects of their lectures three or four times a term or oftener. These are answered by the student at his leisure, and looked over by the lecturer, who is also generally willing to give advice when asked for about books to be read or points connected with his subject. A student who avails himself of these advantages, observes the directions given him, and reads diligently, need hardly ever have recourse to private tuition¹.

It is very desirable that the candidate should not neglect preparation for papers (6) and (7). He should especially practise the art of arranging his ideas on any subject in clear and connected order, and of expressing them in terse and idiomatic lan-

¹ The Professors' lectures are open to all members of the University without charge. The fee for other courses is as a rule one guinea a term. For paper-work an additional fee of one guinea, or less, if but few papers are set, is generally charged.

guage. Training in this branch of education is unfortunately somewhat neglected at present at Cambridge, and it is all the more necessary that the student should avail himself of any opportunities in this direction which may present themselves. It is hardly necessary to say that the practice of essay-writing, though mainly intended as a preparation for these two papers, will be found almost equally useful in other portions of the examination.

A knowledge of foreign languages is not expressly demanded in the examination for the Historical Tripos, but it is of the greatest utility to all historical students, and is indispensable to any one anxious to go beyond an elementary knowledge of modern or medieval history. In the Special Subjects, not only are the original authorities, which are to be studied, frequently in a foreign language, but a first-hand acquaintance with even the modern authorities on these subjects is generally inaccessible to one who cannot read French and German. An opportunity for acquiring these languages is often furnished in the Long Vacation.

Geography should not be neglected. It is an indispensable auxiliary to the study of History, and the student who is examining the political development of any country should always have a map near at hand. Questions requiring a knowledge of geography are expressly included in the scheme of the Tripos, and may be set in almost any part of the Examination.

Finally, let the student remember that three years are not by any means too long for the work of the Tripos, that the Long Vacations are the best times for revision of past work or for preparing for future lectures, and that the first year, if wasted, can never be regained.

III.

The choice of books is a difficult matter, in which it is almost impossible to lay down general rules. The number and nature of the books to be read will differ according to the peculiarities of the individual student, his mental capacity and power of application, the state of his knowledge, and the time at his disposal. Each student must judge for himself, by the light of his own experience and with the advice of his teachers, what he can and ought to read, only remembering this, that one good book, thoroughly digested, is better than half a dozen hastily read and subsequently confused or forgotten, and that he should read nothing without thinking about it.

X | The Special Board for History recommends from time to time a list of books (see below, pp. 22-24) in which the invariable subjects of the Tripos, with the exception of General English History, should be studied. It will be observed that a distinction is made in this list between the books which may be called indispensable, and those which are rather adapted to advanced students.

(1) Of the writers whose works are recommended for *English Constitutional History*, Stubbs covers the earlier period, to A.D. 1485; Hallam the period between that date and 1760; May the period from 1760 to our own time. The German Professor, Dr Gneist, treats the whole history of the English Constitution in his two volumes. He is especially useful during the later periods, supplementing important deficiencies in Hallam, especially with regard to the administrative system. Of the books in the second class, perhaps the most important, so far at least as the earlier periods are concerned, is Stubbs' *Documents*: no one who aspires to a sound knowledge of early Constitutional History can dispense with a study of the charters, writs, and other documents contained in this volume. The work of Sir W. Anson, of which only one volume, dealing with Parliament, is as yet published, will be found very useful for the later periods: those of Bagehot and Dicey for the existing political system and its mode of working. Prof. Freeman's work is a brilliant, though in parts somewhat biassed, sketch. Blackstone contains much valuable information, but must be read with caution, especially when he is dealing with legal antiquities. One or two other works may also be mentioned. Taswell-Langmead's *History of the English Constitution* (1 vol.), though little more than a compilation, will be found a useful summary of the whole subject. Kemble's *Saxons in England* (2 vols.) is instructive for the Anglo-

Saxon period. Gneist's *Student's History of the English Parliament*, Dicey's *Essay on the Privy-Council*, Dowell's *History of Taxation and Taxes in England*, Hall's *Customs Revenue of England*, deal ably with special departments. Reeve's *History of the English Law* (5 vols.) is still a valuable book of reference for the earlier periods (down to the reign of Elizabeth).

(2) In *English Economic History*, almost the only general survey of the whole subject is Dr Cunningham's little book, *The Growth of English Industry and Commerce*. This book has, however, now been superseded, for the earlier periods, by a later and much fuller work, under the same title, of which the first volume, carrying the history of English Economics down to 1558, has already been published. For certain divisions of the subject, the historical portions of Adam Smith (the best edition is that of Nicholson) should be read: the student who has not much time at his disposal should confine himself to these. Levi is useful especially in the later portions of his subject. Brentano's tract has now been to a large extent superseded by Gross' *Gilda Mercatoria* (2 vols. 1890). Of the other books recommended, the most important is Rogers' *History of Agriculture and Prices*, in six volumes, consisting largely of statistics. Prof. Rogers' conclusions are to a large extent summarised in Gibbins' *Industrial History of England* (1 vol. 1890). Schanz and Ochenkowski are not yet translated into English. Riley's

Munimenta contain the *Liber Albus* (1419) and the *Liber Custumarum* (c. 1324), both invaluable for the medieval economy of London. Macpherson's *Annals of Commerce* (4 vols.) is a great storehouse of facts concerning English trade. Other works of value are Seebohm's *English Village Community* (1 vol. 1883), which endeavours to trace the history of that institution back to Roman days, and Toynbee's *Industrial Revolution* (for modern times). Ashley's *Introduction to English Economic History* (Vol. I. published) will be found useful for the Middle Ages. The chapters on social, economical and commercial matters in Knight's *Pictorial History of England* (8 vols.) will also repay examination. The elementary Political Economy required for this paper may be studied in Marshall's *Economics of Industry* or Mrs Fawcett's *Political Economy for Beginners*.

(3) In *Political Science* the only book which treats the whole subject mainly from the inductive point of view is the work of the Swiss Professor, Bluntschli, translated into English under the title of *The Theory of the State*. In some respects it is not a very satisfactory production, and the historical portions especially should be read with caution; but the conception is large, and the student who has mastered the book will not only have acquired much valuable information, but will have surveyed an outline which his subsequent historical reading may correct and fill up. Maine's

Ancient Law, although the universal applicability of some of its conclusions has been much disputed, remains an admirable and suggestive example of the comparative method applied to the elucidation of early society. Spencer's *Political Institutions* is a sketch of the origin and development of forms and methods of government, based on the theory of evolution. Bluntschli's later volumes deal with (1) constitutional law and custom, the fundamental conditions, the organism of the State (Statsrecht), and (2) the end and aim of the state, the means by which it attains its objects, the life and functions of the State (Politik). These are all the books actually recommended by the Board, but the student of Political Science will hardly be content without at all events referring to other works in order to amplify or correct his generalisations. The political systems of ancient Greece may be studied in Aristotle's *Politics*, as well as in the histories of Grote and Curtius; those of Rome in Mommsen, Merivale and Gibbon; those of medieval Europe in Bryce's *Holy Roman Empire*, Guizot's *History of Civilisation in Europe*, and Tocqueville's *Ancien Régime*. Modern constitutions are discussed in Dareste's *Constitutions Européennes*, in another work under the same title by Demombynes, and in Marquardsen's *Handbuch des öffentlichen Rechts*: federal systems in Freeman's *History of Federal Government* (for ancient Greece), Bryce's *American Republic*, and *The Swiss Confederation* by Adams and Cunning-

ham. Much may also be gleaned from Maine's works on *The Early History of Institutions* and *Early Law and Custom*.

(4) and (5, a). The Board, when announcing from time to time the *Special Subjects*, publishes also (in the *University Reporter*) a list of original authorities in which they are to be studied, but it does not indicate the modern writers to whom the student should have recourse. As the subjects are variable, it will not be possible in this article to supply the deficiency. The student engaged upon any Special Subject should obtain information from his teachers respecting modern works, and, having made himself acquainted with the outlines of the subject from these or from lectures, should subsequently set to work upon the original authorities. These should *all* be read and compared with each other, and the points in which they supplement or diverge from one another should be noted.

In Freeman's *General Sketch of European History*, Gibbon's *Decline and Fall*, Hallam's *Middle Ages*, Dyer's *Modern Europe*, Lodge's *Student's Modern Europe*, or Heeren's *European States and Colonies*, the student will generally find an introduction to his period. Spruner's Atlas and Freeman's *Historical Geography of Europe* will give him the geographical information which he requires. X

(5, b). In *Political Economy* the list of books recommended by the Board is sufficiently long not to need supplementing here, but one new work at all events, should be added — Prof. Marshall's

Principles of Economics, of which vol. 1 has been published (ed. 2, 1891). Beginners will find the manuals of Walker, Jevons or Prof. Fawcett useful, but the student need hardly be reminded that in a progressive science of this nature even standard works are very liable to be superseded.

General Theory of Law and Government. The works of Austin, Mill and Dicey, recommended by the Board, will be found a sufficient foundation for this subject, but they may well be supplemented by Prof. Sidgwick's *Elements of Politics*, especially part II. (1 vol. 1891). A useful sketch of the development of political theory is to be found in Sir F. Pollock's *Introduction to the History of the Science of Politics* (1890). Raleigh's *Elementary Politics* (1886) is a clear and suggestive little book for beginners. The student who aspires to become a thorough master of his subject will of course consult the works of the great political philosophers, Hobbes' *Leviathan*, Locke's *Essay on Civil Government*, Montesquieu's *Esprit des Lois*, Bentham's *Fragment on Government*, and others, but these writers hardly come within the scope of the Tripos.

The present state of *International Law* is fully set forth in Hall's treatise (1 vol. ed. 3, 1890), but as the body of rules, conventions and precedents which go by that name are liable to frequent modification, the student should take care to use the latest edition of the work. A start may be made with Lawrence's *Handbook of Public International*

Law (ed. 3, 1890). An abstract of the most important modern treaties—one of the chief sources of the code—is given in Woolsey's *Introduction to the Study of International Law*. The texts of the treaties are to be found in the great collections of Dumont, *Corps Universel Diplomatique du Droit des Gens*, continued by Barbeyrac and Rousset, and Martens (*Recueil des Traités*).

There remains the subject of *General English History*, for which the Board does not undertake to recommend any particular books. The student who enters the University ignorant of this subject will probably be forced to content himself with a study of such text-books as Bright's *History of England*, (3 vols.), Green's *History of the English People* (4 vols.), or his *Short History* (1 vol.). Of these well-known works, that of Bright will be found most useful in the history of the last two or three centuries, those of Green in the medieval and Tudor periods. A useful summary or analysis is to be found in *A Handbook of English Political History*, by Acland and Ransome, but the student should not rely much on published analyses; he will find it much more profitable to make them for himself. A list of some of the chief works on General English History, covering between them nearly the whole field, is subjoined for the use of more advanced students.

Anglo-Saxon and Norman periods.

Lappenberg, *History of England under the Anglo-Saxon Kings* (translated by Thorpe).

- Green, *The Making of England*.
 „ *The Conquest of England*.
 Freeman, *The Norman Conquest*.
 „ *Reign of William Rufus*.

Later Middle Ages.

- Pauli, *Geschichte Englands (1154–1509)*.
 Pearson, *History of England during the Early and Middle Ages*.
 Norgate, *England under the Angevin Kings*.
 Stubbs, *The Early Plantagenets (Epoch Series)*.
 Longman, *Life and Times of Edward III*.
 Gairdner, *Lancaster and York (Epoch Series)*.

Tudors and Stuarts.

- Ranke, *English History*.
 Brewer, *Reign of Henry VIII*.
 Froude, *History of England (1529–1588)*.
 Gardiner, *History of England (1603–1649)*.
 „ *The Puritan Revolution (Epoch Series)*.
 † Guizot, *Charles I.; the Republic; Richard Cromwell*.
 Macaulay, *History of England (1660–1702)*.

Eighteenth and Nineteenth Centuries.

- Stanhope, *Reign of Queen Anne*.
 Mahon, *History of England (1713–1783)*.
 Lecky, *History of England in the Eighteenth Century*.
 † Walpole, *History of England from 1815*.
 † Bright, *History of England under Queen Victoria*.

For any part of English History, from B.C. 55 to A.D. 1689, Lingard's *History of England* will be found a trustworthy and generally impartial book of reference. For Scotch history the student may consult Burton's *History of Scotland*; for ecclesiastical history Perry's *Student's English Church History*, or Short's *History of the Church of England*;

for literary history, Morley's *First Sketch of English Literature*, or Taine's *History of English Literature* (translated by Van Laun); for colonial history, Bancroft's *History of the United States*, Mill's *British India*, and Seeley's *Expansion of England*.

APPENDIX.

SUPPLEMENTARY REGULATIONS FOR THE HISTORICAL TRIPOS.

1. The paper on the Economic History of England will include questions involving some knowledge of Economic Theory.

2. The paper on Political Science will be composed of questions bearing on the inductive study of political institutions. A knowledge of the constitutions of ancient Athens, Sparta and Rome, as well as of more modern constitutions, will be required.

3. In every year four Special Subjects will be chosen, one being taken entirely or mainly from each of the following periods: I. B.C. 31—A.D. 800. II. A.D. 800—1453. III. A.D. 1453—1688. IV. A.D. 1688—1815. Of these subjects each candidate will be required to select one for examination, those candidates who do not offer the alternative subjects

under (5, *b*) being required to select a second special subject. With each special subject one or more original authorities will be specified, one of which will, if possible, be in a foreign language; and questions will be set dealing especially with these authorities.

4. The subjects for Essays on English History will be taken from such departments of English History as are not covered by the papers on the Constitutional and Economic History of England. No Candidate will be allowed to write on more than two of these subjects.

5. The examination will include questions requiring a knowledge of Geography.

BOOKS RECOMMENDED.

The Special Board for History and Archæology publish (June 8, 1886) the following list of books recommended to students who are candidates for the Historical Tripos of 1889 and subsequent years :—

(1) *Constitutional History of England.*

Stubbs, *Constitutional History of England.*

Hallam, *Constitutional History of England.*

May, *Constitutional History of England.*

Gneist, *The History of the English Constitution*, translated by Ashworth.

The following should also be consulted :

Stubbs, *Documents illustrative of English History.*

Blackstone, *Commentaries on the Laws of England.*

Freeman, *Growth of the English Constitution.*

Bagehot, *The English Constitution*.
 Anson, *The Law and Custom of the Constitution*.
 Dicey, *The Law of the Constitution*.

(2) *Economic History of England*.

Adam Smith, *Wealth of Nations*.
 Levi, *History of British Commerce*.
 Brentano, *On the History and Development of Gilds*.
 Cunningham, *Growth of English Industry and Commerce*.

The following should also be consulted :

Riley, *Munimenta Gildhallæ Londoniensis* (Rolls Series).
 Rogers, *History of Agriculture and Prices in England*.
 Schanz, *Englische Handelspolitik*.
 Ochenkowski, *Englands wirthschaftliche Entwicklung*.

(3) *Political Science*.

For general introduction to the subject :

Bluntschli, *Lehre vom modernen Stat*, Vol. I (authorized English translation published by the Clarendon Press).

Maine, *Ancient Law*.

The following should also be consulted :

Bluntschli, *Lehre vom modernen Stat*, Vols. II, III (translated into French under the titles of "Droit Public Général," and "La Politique").

Spencer, *Political Institutions*.

The more important examples of different forms of government should be further studied in special histories : in particular the constitutions of Sparta, Athens and Rome should be studied in Grote's *History of Greece* and Mommsen's *History of Rome*, or in other works where they are treated in equal detail.

(5, b) *Political Economy*.

Bagehot, *Lombard Street*.

Fawcett, *Free Trade and Protection*.

Marshall, Economics of Industry.
 Mill, Principles of Political Economy.
 Jevons, The State in Relation to Labour.
 Walker, Money, Trade and Industry.

The following should also be consulted :

Roscher, Political Economy (translated by Lalor).
 Sidgwick, Principles of Political Economy, Book III.

General Theory of Law and Government and the Principles of International Law.

Austin, The Province of Jurisprudence Determined,
 Lectures I, V, VI.
 Mill, Representative Government.
 Dicey, The Law of the Constitution.
 Hall, International Law.

N.B. Students should be warned that this list is always liable to modification. Notice of any change made by the Board will be published from time to time in the *University Reporter*.

THE PREVIOUS EXAMINATION.

THE Previous Examination (familiarly called the "Little-go") is the first step towards any Cambridge degree. It consists of two Parts (Part I. being chiefly Classical, and Part II. chiefly Mathematical) and three Additional Subjects (Mechanics, French, and German).

The Candidate for the B.A. degree with Honours is required to pass both Parts and one of the three Additional Subjects; after which he is free to devote his time to the subjects of the particular Tripos which he has chosen.

The Candidate for the Ordinary B.A. degree is required to pass both Parts, but not an Additional Subject.

The Examination is held by the University three times in the year, at the end of the May Term, and at the beginning and end of the October Term. Either Part, or any one of the Additional Subjects, may be taken alone; but the great majority of Honour Students pass the whole Examination in their first term, and usually at the beginning of the term. A Student is not allowed to go in for the Examination in any term unless

he is residing during that term, or has already kept by residence some previous term. The name of the Candidate should be sent to the Registry of the University a fortnight before the examination commences by the Tutor of his College or Hostel, or (if he is a Non-Collegiate Student) by the Censor.

If the Student has a Certificate from the Cambridge Local Examination Syndicate, or from the Oxford and Cambridge Schools Examination Board, which entitles him to exemption from any part of the Previous Examination, this exemption must be claimed by his Tutor during his first term.

The examination is conducted entirely by printed papers. The Candidate for either Part is required to satisfy the Examiners in every paper of that Part; but a slight deficiency in one paper would probably be condoned if the Candidate had done well in all the other papers.

IN PART I. five papers are set on the following subjects :—

(1) A Greek Gospel : questions on the subject-matter, and short passages for translation and explanation.

| | | |
|---------------------|---|--|
| (2) A Latin Classic | } | Passages for translation with grammatical or other questions thereupon, and questions on the subject-matter. |
| (3) A Greek Classic | | |

- (4) Unprepared Latin Translation: two or more easy passages are set, and the Candidate is allowed to bring a Latin dictionary.
- (5) Latin and Greek Grammar, with reference principally to the appointed Latin and Greek Classics. In this paper the Candidate is required to satisfy the Examiners in the Grammar of both Languages.

The books appointed as the subjects of papers (1) (2) and (3) in any year are announced not later than May in the previous year. A Classical Book is allowed as an alternative to the Greek Gospel. Also natives of Asia who are not of European parentage may be examined in certain English books instead of papers (1) and (3), and may write an English Essay instead of answering the questions on Greek Grammar in paper (5).

Candidates who are preparing for this Part will find it advisable to bestow especial care on Latin and Greek Accidence, and on obtaining that amount of insight into Latin constructions which will enable them (with the aid of a dictionary) to pass the paper in Unseen Translation. It must be remembered that the questions set in the Latin and Greek Grammar paper are chiefly based on the appointed Classics. While therefore it is important to attend not only to the normal forms of each language, but also to all grammatical peculiarities occurring in the authors

4 THE PREVIOUS EXAMINATION.

set, a student will do well not to pay attention to abnormal forms not occurring in his set books until he has mastered the regular forms of Attic Greek on the one hand and Ciceronian Latin on the other. As the questions set are almost entirely on Accidence, any of the many Latin and Greek Grammars will serve. We need only mention the smaller Greek Grammars by Parry, Abbott and Mansfield, Goodwin, Wordsworth; Perkins' Greek and Latin Accidence; the Public School Latin Primer, and the smaller Latin Grammars of Curtius, Roby, and Allen. There are many books of passages for translation from Latin into English, by which a candidate may practise for the Unseen Translation paper, e.g. Jerram's *Anglice Reddenda*, Shuckburgh's *Passages for Translation at Sight*, Bennett's *Easy Passages*.

IN PART II. four papers are set on the following subjects:—

(1) Paley's *Evidences of Christianity* (or as an alternative Jevons' *Elementary Logic*).

(2) Euclid, Books I, II, III, Definitions 1—10 of Book V, and Propositions 1—19 of Book VI. The Candidate is not required to give Euclid's proof of a proposition, but may give any geometrical proof which does not depend on subsequent propositions or on axioms or postulates not employed by Euclid. Euclid's definitions must be known. Three easy riders are usually set at the end of the paper, but are not necessary for passing.

(3) Arithmetic. The use of algebraical symbols in solving problems is allowed in this paper.

(4) Algebra: as far as quadratic equations with two unknown quantities, problems, ratio, proportion, arithmetical and geometrical progressions.

In mastering Paley's arguments Crosse's Analysis of Paley is often used, or the 'Paley Sheets' published by J. Palmer, Cambridge. As some Students find a difficulty in seeing the bearing of questions which are expressed in language differing from that used by Paley, it is a useful exercise for such Students to work the papers set in previous years. It is needless to mention any of the elementary text-books that can be used in preparing for the three mathematical papers¹.

In each of the three ADDITIONAL SUBJECTS OF THE PREVIOUS EXAMINATION two papers are set.

MECHANICS includes the composition and resolution of forces in one plane at a point and of parallel forces; the properties of the centre of gravity; the lever, the inclined plane, and the pulley; the composition and resolution of velocities

¹ Copies of all the papers set in any Previous Examination, with answers to the questions in Arithmetic, Algebra, and Mechanics, are published by the University Press, price 2s. or 2s. 6d. A book of all the Accidence, Paley, and Mathematical papers set during five years, with answers to the Mathematical questions, is published by J. Palmer, Cambridge, price 5s.

and accelerations in one plane; rectilinear motion under uniform acceleration; Newton's laws of motion; the time of flight, greatest height, and horizontal range of a projectile. Questions also are to be set on elementary *Trigonometry*, namely, the measurement of angles in degrees, minutes, and seconds, the definitions and ordinary relations of the trigonometrical ratios of one angle, and their numerical values in simple cases.

Usually one paper contains questions on Statics with a little Trigonometry, the other questions on Dynamics with a little Trigonometry. In proving the Parallelogram of Forces the Candidate is at liberty to use either the statical or the dynamical proof. Hamblin Smith's Statics contains all that is needed for the Statics questions. Bourne's Notes defines the range of the Dynamics questions, but requires to be supplemented by oral teaching, or by one of the larger books such as Lock. Either Todhunter's Mechanics or Loney's Mechanics and Hydrostatics is more than sufficient for both subjects.

For FRENCH or GERMAN the Candidate must prepare selected books, which are announced not later than April in the year preceding the examination. In each language one paper is set on the selected books, containing passages for translation with questions on grammar arising out of the books; and one paper is set containing passages for translation from other books, with questions on grammar arising out of the passages set. The

Candidate is required to pass in both papers ; and he must remember that to pass the paper of unprepared translation requires a real knowledge of the language.

Exemption from the Previous Examination or part of it can be obtained in one of the following ways :—

A. Candidates for the Cambridge Senior Local Examinations will be exempted

- (1) from Part I. if they passed in Religious Knowledge (including the Greek Gospel) and attained a certain standard above the ordinary pass standard in Latin and in the Greek division of Section C.
- (2) from Part II. if they attained a certain standard above the ordinary pass standard in Euclid, in Algebra, and in either Religious Knowledge or Elementary Logic.
- (3) from the Additional Subjects if they attained a certain standard above the ordinary pass standard either in Applied Mathematics, or in French, or in German.

B. Candidates for the Cambridge Higher Local Examinations for Men and Women will be exempted

- (1) from Part I. if they passed in Religious Knowledge, in Latin, and in Greek.
- (2) from Part II. if they passed in Euclid, in Algebra, and in either Religious Knowledge or Logic.
- (3) from the Additional Subjects if they passed either in Statics, Dynamics, and Astronomy, or in French, or in German.

C. Candidates for the Higher Certificates of the Oxford and Cambridge Schools Examination Board will be exempted

- (1) from Part I. if they passed in Scripture Knowledge (including Greek Text), in Greek, and in Latin.
- (2) from Part II. if they passed in Scripture Knowledge and in both Elementary and Additional Mathematics.
- (3) from the Additional Subjects if they passed in Trigonometry, Statics, and Dynamics, or in French, or in German.

D. Exemption from the Previous Examination is given to a Student who has completed a course of three years, with success in certain Examinations, at a College or Institution in the United Kingdom or its Colonies to which the University has granted the privilege of Affiliation. Such a Student is also allowed to take the B.A. degree after two years' residence in the University, provided he passes a Tripos Examination.

THE ORDINARY (*or* POLL) DEGREE.

THOSE Students in Arts who do not attempt a Tripos Examination with a view to an Honours Degree are required, in accordance with a scheme first issued in 1865, to pass three examinations: (i) The Previous Examination, which has been already described; (ii) The General Examination; (iii) One of the Special Examinations.

These examinations are termed Pass Examinations; and the candidates for them are termed poll-men (*οἱ πολλοί*). But in recent years, owing to the institution of Triposes in so many branches of study, the poll-men have been decidedly less numerous than the Honour Students. It seems possible however that the number of poll-men may now be increased, for there are signs that the standard required for Honours in some Triposes is likely to be raised, and at the same time changes have been made in the General and Special Examinations with a view to their providing a more full and satisfactory course of study.

These changes were sanctioned by the Senate in 1890 and 1891¹. The following are the most important: (1) Both General and Special Examinations are divided into two Parts, which may be taken separately; (2) A period of English History and Essay-writing are added to the subjects for the General Examination; (3) Voluntary subjects are added to each Special Examination, and success in these will be denoted by marks in the class list; (4) Special Examinations in Mathematics and in Classics are instituted.

Those poll-men who have passed the Previous Examination during their first term will now be able to pass one part of the General Examination at the end of their first year, and the other part after another half year; they can then pass the first part of their Special Examination at the end of their second year, leaving one year for preparation for the other part. These Students may be expected to endeavour by study of the voluntary subjects to improve their position in the class lists of their Special Examinations.

Many poll-men however will not have passed the Previous Examination till the end of their first year. These will probably spend their second year over the General Examination, and their third year over their Special Examination without attempting the voluntary subjects.

¹ The Special Examination in Physics was instituted, and that in Chemistry was modified, in March 1892.

We proceed now to describe these Examinations in detail, premising that each is held twice in the year, namely, at the end of the Easter Term and at the end of the Michaelmas Term.

THE GENERAL EXAMINATION consists of two Parts, either of which, but not both, may be passed in the Student's third term of residence, provided he has already passed both Parts of the Previous Examination. Both Parts, or either Part alone, may be passed in the fourth or in any subsequent term.

The Student who is preparing for one Part only will be guided in his choice between them by the arrangement of lectures at his College. But it is probable that for the examination in June Part I. will be usually chosen. Two of the subjects in this Part are changed annually; and, if the Student is in any danger of failing to pass in June, the December examination can be relied on to provide a second chance before the subjects are changed.

PART I. consists of five papers on the following subjects :

- (1) A Greek Classic } appointed in April of
- (2) A Latin Classic } the preceding year.
- (3) Algebra; viz. easy equations of a degree not higher than the second, involving

not more than two unknown quantities ; the proofs of the rules of Arithmetical and Geometrical Progression, with simple examples ; and easy problems in Elementary Algebra.

- (4) Elementary Statics, namely, the composition and resolution of forces acting in one plane at a point, the mechanical powers, and the properties of the centre of gravity ; together with Elementary Trigonometry, namely, the measurement of angles in degrees, minutes, and seconds, the definitions and ordinary relations of the trigonometrical ratios of one angle, and their numerical values in simple cases.
- (5) One or more passages of English for translation into Latin Prose. This paper is voluntary.

PART II. consists of five papers on the following subjects :

- (1) The Acts of the Apostles in the original Greek.
- (2) A selected portion of English History. (For the examinations in 1893 the period selected is from 1625 to 1685 : for those in 1894 from 1604 to 1660.)
- (3) One or more subjects for an English Essay or Essays, the subjects being

taken from the selected portion of English History.

- (4) Elementary Hydrostatics, namely, the pressure of non-elastic fluids, specific gravities, the properties of elastic fluids, and the principal instruments and machines whose action depends on the properties of fluids :

and Heat, namely, the explanations of

Temperature and Heat ; the processes of Conduction, Convection and Radiation ; the effects of Heat when applied to Solids, Liquids and Gases ; the construction of a common Thermometer ; the comparison of Thermometric Scales ; the formation of Dew, Hoar Frost, Clouds and Rain ; Congelation and Ebullition.

- (5) A play of Shakespeare or some portion of the works of Milton. This paper is voluntary.

The Student must be careful to observe that the papers on the Greek and Latin Classics and the Acts will each consist of two parts, one containing passages for translation and explanation, and the other containing questions on the subject-matter of the book ; and that he is required to satisfy the Examiners in *both* parts of each paper.

To pass either Part of the Examination the Student must pass each of the four obligatory

papers of that Part, and further he must obtain upon the five papers taken together a certain total of marks. The Student who is weak in some one or more subjects will therefore be assisted in passing the examination by proficiency in other subjects, or by marks gained in the voluntary paper. It is found that not many Students attempt the Latin Prose with success; but all might with advantage prepare the play of Shakespeare.

The list of Students who have passed either Part of the General Examination is divided into four classes, the order of the names in each class being alphabetical.

THE SPECIAL EXAMINATIONS are now sixteen in number, and the following is a list of their subjects:—

- | | |
|--|---------------------------|
| (a) Theology. 1004. | (b) Logic. 11. |
| (c) Political Economy. 217. | |
| (d) Law. 628. | (e) History. 173. |
| (f) Chemistry. 245. | (g) Physics. |
| (h) Geology. 32. | (i) Botany. 15. |
| (j) Zoology. 12. | (k) Physiology. |
| (l) Mechanism and Applied Science. 71. | |
| (m) Music. 21. | (n) Modern Languages. 84. |
| (o) Mathematics. | (p) Classics. |

It may be of interest to the Student to know

which of these subjects have attracted the larger numbers of Candidates in the past ; we have therefore placed after the title of each of the 12 old Special Examinations a figure denoting the number of undergraduates who passed in that subject during the eight years 1885—1892.

In making choice of a subject the Student will be guided mainly by his intentions with regard to a future career. The necessary teaching is in most cases not provided by the Student's own College, but is organized by one of the University Boards of Studies.

Ten of the 16 Examinations are divided into two Parts, both of which must be passed to entitle the Student to a degree. The first Part can be passed at the end of the Student's sixth term, or later ; the second Part at the end of his ninth term. The names of Students who pass either Part will be arranged in three classes (or, in the case of the Music Special, in two classes), those in the first Class in order of merit, those in the second or third Class alphabetically. If a Student takes a voluntary subject he may not only improve his position in the Class List, but also obtain a mark denoting that he passed satisfactorily in that subject.

One of the Examinations (Mechanism and Applied Science) has not yet had its regulations modified ; but it is probable that it will before long be divided into Parts, with the addition of voluntary subjects, on the plan just described.

The remaining five Examinations (Logic, Geology, Botany, Zoology and Physiology) are identical with portions of the Moral or Natural Sciences Tripos. They will therefore be held only once in the year (in the Easter Term) and will not be subdivided into Parts. A Student may be a Candidate for one of these Special Examinations at the end of his eighth term; but he will have to keep his ninth term before he is admitted to his degree. The Class Lists will in these Examinations also consist of three Classes, the order of merit being followed in the arrangement of the first.

We will now describe in detail the subjects of each Special Examination. In every case of a variable paper the subject selected for examination in one year is to be announced two years beforehand.

(a) The Special Examination in Theology.

The subjects of Part I. are :

- (1) Outlines of Old Testament History.
- (2) One of the Gospels in Greek.
- (3) The History of the Jews from the close of the Old Testament History to the Fall of Jerusalem, with special attention to the condition of Palestine in the time of our Lord. (This paper is voluntary.)

The subjects of Part II. are :

- (1) Selected portions (i) of the Historical Books of the Old Testament, and (ii) of the Psalms or Prophets.

- (2) One or more of the Epistles in Greek.
- (3) Outlines of English Church History to 1830.
- (4) A selected portion of the Historical Books of the Old Testament in Hebrew, with easy questions on Hebrew Grammar.
- (5) Outlines of Early Church History to the death of Leo the Great.
- (6) A selected subject or period of English Church History, with a selected original authority in English.

Of these papers (4) (5) and (6) are voluntary, and no Candidate may take all three of them.

The paper on the Gospel and that on the Epistle or Epistles will contain sentences or passages for translation, together with questions on the introductory and subject-matter, and on the criticism and interpretation of the text, and phrases or sentences for retranslation into Greek.

The paper on the selected portion of the Historical Books of the Old Testament in Hebrew will contain passages for translation and easy questions on grammar, together with easy sentences for retranslating into Hebrew, and one or more passages for pointing.

In the paper on the selected subject or period of English Church History a general acquaintance with the civil history of the period in its bearing upon the Church History will be expected.

In preparing for the Special Examination in

Theology the Student will find great help from some of the numerous courses of Lectures provided by the various Colleges, more especially in Church History and in Bible History. The most suitable text-books will usually be recommended by the Lecturer. But the Student cannot be wrong in using for the study of the selected Books of the Old and New Testament the editions published in "The Cambridge Bible for Schools and Colleges," the English edition for the Old Testament, the Greek edition for the Gospels and Epistles. The Revised Version must not be neglected. The same Dictionaries, Grammars, and Concordances may be used, which are recommended in Part IV. of this Guide. For the Old Testament History paper Maclear's Outlines may be used, or the larger work of P. Smith. The New Testament History of the latter writer will be useful for the voluntary paper of Part I. In English Church History perhaps Perry's Student's English Church History or Jennings' *Ecclesia Anglicana* is the most convenient book.

(b) For the Special Examination in Logic the candidate must take the two papers on Logic and Methodology set in the First Part of the Moral Sciences Tripos, and also the paper of Essays. To the paper of Essays will be appended some alternative questions intended only for candidates in the Special Examination in Logic. The character of the questions set, and the method of approving them, will be determined by the Regulations for

the First Part of the Moral Sciences Tripos ; for these the Student is referred to Part VIII. of this Guide.

(c) The Special Examination in Political Economy.

Part I. consists of *two papers* on Political Economy, not including the Theory of Taxation and the Economic Functions of Government; with *one voluntary paper* on the Industrial History of England.

Part II. consists of *two papers* on the Theory of Taxation and the Economic Functions of Government, together with the History of Trade and Finance in England from 1760 to 1860 ; with *one voluntary paper* on the General Theory of Law and Government.

The Board for Moral Science published in 1891 the following list of books recommended :

For Part I. ; Jevons, Money and the Mechanism of Exchange : Marshall, Economics of Industry : Mill, Principles of Political Economy, Book III. : Walker, Land and its Rent. These also to be consulted ; Bagehot, Lombard Street : Keynes, Scope and Method of Political Economy : Nicholson, Money and Monetary Problems, Part I. : Walker, The Wages Question.

(Voluntary) Ashley, Economic History : Rogers, Six Centuries of Work and Wages. These also to be consulted ; Cunningham, The Growth of English Industry and Commerce : Toynbee, The Industrial Revolution.

For Part II.; Fawcett, Free Trade and Protection: Levi, History of British Commerce: Mill, Principles of Political Economy, Book V.: Rae, Contemporary Socialism. These also to be consulted; Jevons, Methods of Social Reform: Jevons, The State in relation to Labour: Sidgwick, Principles of Political Economy, Book III.

(Voluntary.) Austin, The Province of Jurisprudence Determined, Lectures I., V., VI., as abridged in The Student's Austin. Dicey, The Law of the Constitution. Mill, Representative Government.

(d) The Special Examination in Law.

Part I. consists of three papers on:—

- (1) Some branch of English Constitutional Law.
- (2) Elementary parts of the English Law of Real Property.
- (3) (*Voluntary.*) Select Cases illustrating one or both of the preceding subjects.

Part II. consists of three papers on:—

- (1) English Criminal Law.
- (2) The English Law of Contract or of Tort or some branch of the English Law of Property.
- (3) (*Voluntary.*) Select Cases illustrating one or both of the preceding subjects.

The branches of Law and the Select Cases which are to be the subjects of examination in any

year are announced two years beforehand by the Board for Law, which also recommends books.

(e) The Special Examination in History.

Part I. consists of three papers on :—

- (1) Outlines of General English History from the earliest period to 1485.
- (2) Outlines of English Constitutional History 1066—1485.
- (3) (*Voluntary.*) A special period of English History prior to 1485.

Part II. consists of four papers on :—

- (1) Outlines of General English History 1485—1832.
- (2) Outlines of English Constitutional History 1485—1832.
- (3) A subject or period of Foreign History.
- (4) (*Voluntary.*) A special period of English History after 1485.

The special periods which are to be the subjects of examination in any year are announced two years beforehand by the Board for History and Archæology, which also recommends books.

(f) The Special Examination in Chemistry.

Part I. consists of five papers :

- (1) The simpler chemical properties of the commoner elements and compounds, and the experimental laws of Heat.
- (2) Practical work in Chemistry.

- (3) Practical work in Heat.
- (4) (*Voluntary.*) Elementary Electricity and Magnetism.
- (5) (*Voluntary.*) Practical work in Electricity and Magnetism.

Part II. consists of three papers :

- (1) The Chemistry of the commonly occurring elements, metallic and non-metallic, together with the rudiments of Organic Chemistry.
- (2) Practical work in Qualitative Analysis.
- (3) (*Voluntary.*) Practical work in Volumetric Analysis.

The Examination is conducted by printed papers, but the Examiners may examine Students orally on the apparatus exhibited and on the practical work done. Full schedules defining the character and scope of the papers have been published by the Board for Physics and Chemistry, and may be found in the Book of Ordinances, or in the Cambridge University Calendar.

- (g) The Special Examination in Physics.

Part I. consists of six papers :

- (1) The elementary parts of the mechanics of solid and fluid bodies, including the simpler physical properties of matter.
- (2) Practical work in the same.
- (3) (*Voluntary.*) The experimental laws of Heat.

- (4) (*Voluntary.*) Practical work in the same.
- (5) (*Voluntary.*) The simpler chemical properties of a selection of the commoner elements and compounds.
- (6) (*Voluntary.*) Practical work in the same.

Among the voluntary papers a candidate may take the two papers on Heat, or the two on Chemistry, but not both subjects.

Part II. consists of four papers :

- (1) Electricity and Magnetism.
- (2) Practical work in the same.
- (3) (*Voluntary.*) More advanced Electricity and Magnetism, having special reference to electrical and magnetic measurement.

- (4) (*Voluntary.*) Practical work in the same.

The paragraph on page 22 respecting the Chemistry Special applies also to this Examination.

(*h*), (*i*), (*j*), (*k*). For the Special Examination in Geology, Botany, Zoology, or Physiology, the Candidate must take those questions which refer to his subject in the papers and practical examination of the First Part of the Natural Sciences Tripos. The character of the questions set, and the method of approving them, will be determined by the Regulations for the First Part of the Natural Sciences Tripos; for these the Student is referred to Part VII. of this Guide.

- (*l*) The Special Examination in Mechanism

and Applied Science is still conducted under the old Regulations; but will probably be altered before long. At present five papers are set:— (1) Mechanics, (2) Heat, (3) Mechanism, (4) Theory of Structures, Strength of Materials, and Principles of Surveying and Levelling, (5) Electricity and Magnetism. The papers on Mechanics and on Heat are obligatory; of the other three papers each Candidate must choose one and only one. He is further required to satisfy the Examiners (1) as to his ability to write an accurate description or specification of an instrument, machine or model exhibited, and to make a working sketch to scale, and (2) as to his practical skill in the use of the tools or instruments required in the alternative subject which he chooses.

Preparation for this Examination is provided under the direction of Professor Ewing in the University Workshops and Museum of Mechanism. The Student who purposes availing himself of this training will do well to arrange for doing so as soon as possible after the commencement of his residence at Cambridge¹.

(*m*) The Special Examination in Music is identical with the Preliminary Examination for the Degree of Bachelor of Music.

¹ A Tripos in Mechanical Sciences was established by Grace of the Senate in November, 1892. The regulations can be obtained by applying to Professor Ewing, at the Engineering Laboratory, Cambridge.

Part I. consists of an Examination in *Acoustics*, in accordance with the following Schedule published by the Board for Music :—

Sensation and external cause of sound. Mode of its transmission. Nature of wave motion in general. Application of the wave theory to sound. Elements of a musical sound. Loudness and extent of vibration. Measures of absolute, and of relative, pitch. Resonance. Analysis of compound sounds. Helmholtz's theory of musical quality. Motion of sounding strings. The pianoforte and other stringed instruments. Motions of sounding air columns. Flue and reed stops of the organ. Orchestral wind instruments. The human voice. Interference. Beats. Helmholtz's theory of consonance and dissonance. Combination-tones. Consonant chords. Construction of the musical scale. Exact and tempered intonation. Equal temperament. Systems of pitch notation.

In this subject no knowledge of mathematics beyond arithmetic is required. The Board recommends the following books :—Helmholtz, *Die Lehre von den Tonempfindungen*, Parts I. and II. (Vieweg, Braunschweig). Ellis's Translation of the same. Sedley Taylor, *Sound and Music*.

Part II. consists of an Examination in *Harmony* (in not more than four parts) and in *Counterpoint* (in not more than three parts).

(n) The Special Examination in Modern Languages is subdivided into (A) an Examination

in two Parts in English and French, and (B) an Examination in two Parts in English and German. The Student can obtain his degree by passing both Parts of (A), or both parts of (B), or Part I. of either and Part II. of the other.

Part I. of the *Examination in English and French* consists of four papers :—

- (1) Explanation and discussion of passages from selected English books not earlier than 1500, with questions on literature connected with those books.
- (2) Translation into English and explanation of passages from selected French books later than 1600, with questions on literature connected with those books, and with questions on French Grammar.
- (3) (*Voluntary.*) Translation into English and explanation of passages from a selected book in Old French, with easy questions on historical Grammar.
- (4) (*Voluntary.*) Translation from English into French.

Part II. consists of six papers :—

- (1) Explanation and discussion of passages from selected English books, of which one shall be earlier than 1500, with questions on the grammar, etymology, and history of the English language.

- (2) Translation into English and explanation of passages from selected French books later than 1600, with questions on literature connected with those books, and with questions on French Grammar.
- (3) Translation of passages from other French books.
- (4) Translation from English into French.
- (5) (*Voluntary.*) Elementary Anglo-Saxon.
- (6) (*Voluntary.*) Original Composition in French.

The papers for the *Examination in English and German* are described in the same words as the preceding, if we alter "French" into "German," and "Old French" into "Middle High German."

(o) The Special Examination in Mathematics.

Part I. consists of three papers on :—

- (1) Elementary Algebra up to and including Permutations, Combinations, the Binomial Theorem, Logarithms (including actual use of tables), and the Exponential Theorem.
- (2) Elementary Geometrical Conic Sections and Euclid XI. 1—21, with easy exercises in the Geometry of Euclid.
- (3) (*Voluntary.*) Elementary Plane Analytical Geometry, including the straight line referred to rectangular (or when equally

simple to oblique) coordinates ; the circle referred to rectangular coordinates ; the equations of the parabola, ellipse and hyperbola referred to their principal axes, and the equations of the tangent and of the normal at any point and of the polar of a point ; easy exercises.

Part II. consists of four papers on :—

- (1) Elementary Trigonometry, including Solution of Triangles by logarithmic tables.
- (2) Elementary Mechanics (Statics and Dynamics), including the equilibrium of forces acting in one plane, parallel forces, couples ; properties of the centre of gravity ; simple mechanical powers ; friction ; uniform and uniformly accelerated motion in a straight line ; composition and resolution of velocities and accelerations in one plane ; the laws of motion ; uniform circular motion ; work and energy ; simple propositions respecting projectiles in vacuo ; collision of smooth spheres.
- (3) Elementary Optics and Astronomy, including the laws of reflection and refraction of light ; formation of images by reflection and refraction at plane surfaces and at a single spherical surface (excluding aberrations) and by refraction through a thin lens ; the eye and

the use of spectacles ; construction and theory of the simple astronomical telescope and of the microscope ; the sextant, transit, transit circle and equatorial ; the coordinates of a heavenly body ; apparent motion of the heavens ; shape, dimensions and motion of the earth ; Kepler's laws ; length of day, the seasons ; sidereal, apparent and mean solar time ; simple methods of determining terrestrial latitude and longitude ; principal effects of refraction and aberration ; meaning of parallax ; general explanation of the phases of the moon and eclipses.

- (4) (*Voluntary.*) Elements of the Differential Calculus, including differentiation of simple functions ; Taylor's Theorem ; maxima and minima of a function of one independent variable ; tangents and normals to curves ; curvature.

It was intended that this and the following should be somewhat harder than the other Special Examinations, and should be useful to Students who look forward to teaching Mathematics or Classics as Schoolmasters. It is possible that some who have already taken their degree by another examination will like to enter for one of these two Specials.

- (*p*) The Special Examination in Classics.

Part I. consists of four papers on :—

- (1) Selected portions from not more than two Greek prose authors.
- (2) Selected portions from not more than two Greek verse authors.
- (3) Unprepared Translation from Greek.
- (4) (*Voluntary.*) A selected portion of Greek History.

Part II. consists of five papers on :—

- (1) Selected portions from not more than two Latin prose authors.
- (2) Selected portions from not more than two Latin verse authors.
- (3) Unprepared Translation from Latin.
- (4) Latin Prose Composition.
- (5) (*Voluntary.*) A selected portion of Roman History.

Papers (1) and (2) in each Part will contain passages for translation with grammatical and other questions immediately arising therefrom.

The portions of authors and of history selected for the examination of any year will be announced two years beforehand.

The authors are to be selected from the following lists :—Herodotus, Thucydides, Plato, Xenophon, Demosthenes ; Homer, Æschylus, Sophocles, Euripides, Aristophanes ; Cæsar, Cicero, Livy, Tacitus ; Plautus, Terence, Virgil, Horace, Juvenal.

A portion of the selected books will bear upon the selected portions of History.

As an indication of the amount of work likely to be required of Candidates we subjoin the portions which have been selected for the Examinations in 1893 :

Thucydides, Book 1.: Plato, Euthyphro and Meno.

Æschylus, Persæ : Aristophanes, Ranae.

Greek History, B.C. 477—432.

Cicero, Tusculan Disputations 1. and Somnium Scipionis : Livy, Book v.

Terence, Phormio : Juvenal, Satires 1, 3, 4, 7, 10.

Roman History, B.C. 509—367.

As already explained, the Student can take Part I. at the end of his second year of residence ; but he cannot take Part II. until the end of his third year.

•

The papers set in each Special Examination are published by the University Press at varying prices. Many of them, with papers set in the Previous and General Examinations, are reprinted in the University Almanack, J. Webb and Co., Cambridge, price 3s. 6d.

The first part of the book is devoted to a general history of the United States from its discovery by Columbus in 1492 to the present time. It covers the early years of settlement, the struggle for independence, the formation of the Constitution, and the growth of the nation.

The second part of the book is devoted to a detailed history of the United States from the beginning of the American Revolution in 1776 to the present time. It covers the war of independence, the formation of the Constitution, and the growth of the nation.

The third part of the book is devoted to a detailed history of the United States from the beginning of the American Revolution in 1776 to the present time. It covers the war of independence, the formation of the Constitution, and the growth of the nation.

The fourth part of the book is devoted to a detailed history of the United States from the beginning of the American Revolution in 1776 to the present time. It covers the war of independence, the formation of the Constitution, and the growth of the nation.

The fifth part of the book is devoted to a detailed history of the United States from the beginning of the American Revolution in 1776 to the present time. It covers the war of independence, the formation of the Constitution, and the growth of the nation.

The sixth part of the book is devoted to a detailed history of the United States from the beginning of the American Revolution in 1776 to the present time. It covers the war of independence, the formation of the Constitution, and the growth of the nation.

The seventh part of the book is devoted to a detailed history of the United States from the beginning of the American Revolution in 1776 to the present time. It covers the war of independence, the formation of the Constitution, and the growth of the nation.

The eighth part of the book is devoted to a detailed history of the United States from the beginning of the American Revolution in 1776 to the present time. It covers the war of independence, the formation of the Constitution, and the growth of the nation.

UNIVERSITY OF CAMBRIDGE LOCAL EXAMINATIONS, LECTURES, &c.

IN June, 1857, the University of Oxford passed a Statute establishing annual Examinations of persons not members of the University, and the University of Cambridge appointed a Syndicate to consider whether and under what conditions it should institute similar Examinations. For some months the two Universities were in communication, with a view to joint or alternate action, and in November, 1857, the Cambridge Syndicate reported in favour of the Examinations, and recommended that those Students who passed the more advanced of the two proposed Examinations should, as at Oxford, be designated "Associates in Arts." This recommendation met with considerable opposition in Cambridge, and the joint action with Oxford was terminated in February, 1858, by an amended Report, in which the proposal to confer

the title of "A.A." was abandoned. This difference between the two systems continues to the present time.

The general plan of the Examinations, and many or most of the original details, were due to Mr T. D. Acland, now (1891) Sir T. D. Acland, and Dr Temple, now Bishop of London. The idea was encouraged, and suggestions for its realization were made, by many men of eminence in very different professions, amongst whom may be especially mentioned Messrs Ruskin, Dyce, Hullah, Richmond, Prof. Max Müller, and Dr Harvey Goodwin, now Bishop of Carlisle, besides many actively engaged in the work of education in the large Grammar Schools. The University of Cambridge readily adopted the general plan of Examinations on the recommendation of Dr Philpott, at that time Vice-Chancellor and since Bishop of Worcester, Sir G. E. Paget, Dr Goodwin, Mr H. Latham, Dr Champion, and others, and, after making such alterations as were suggested by renewed correspondence with those engaged in education, established in Feb. 1858 a scheme which was in the main the same as that now in operation. The first Examination by the University of Cambridge took place in December, 1858, six months after the first Examination held by Oxford. Girls were admitted to the Cambridge Examinations in 1865, and to the Oxford Examinations some years later.

It was at first thought that the winter was so unfavourable a season for collecting boys at centres

for Examination that the Cambridge Examination could not succeed, and the idea of alternate examinations was again considered. But soon after that time schools began to divide their year into three terms, and Oxford has found it very difficult to suit the convenience at the same time of schools which have three terms and schools which have two half-years ; whereas all schools break up at Christmas. This has given the advantage to the winter Examination, and Cambridge has been very liberal in the establishment of new centres, to bring the Examination as near as possible to the schools which send in Candidates.

The promoters of these Examinations were anxious to fill a void in the education of the country. The system of inspection carried out by the Privy Council afforded an adequate test and stimulus for the schools of the poorer classes. The Universities exercised a powerful though in some degree indirect influence over the great schools of the country, partly by the stimulus of scholarships and fellowships, and partly by supplying the teachers and examiners of the schools, means aided by the general acceptance of University standards in all that belongs to the higher education of the country. But the schools lying between the National Schools and the larger Grammar Schools had no direct encouragement held out to them, no system of inspection over them, no recognised and sufficient criteria of merit as regards either schools or scholars. That the Society of Arts did

not supply all that was needed for this purpose is clear from their own words in the programme of their Examinations for 1858, wherein they hailed the Statute of the University of Oxford with cordial satisfaction.

At first the scheme was regarded as an experiment; but it has now taken a definite place in the country, and has been extended so as to include the examination of girls. In 1858, 370 boys entered as candidates. In 1881, 4,176 boys and 2,810 girls entered as Candidates; and the Examinations were held at 110 centres for boys, and 96 for girls. In 1888 the numbers were 5,870 boys and 4,158 girls, or more than 10,000 in all, and there are now about 190 centres for boys and 160 for girls. The Colonies have availed themselves of the opportunity afforded for encouraging education and giving it a right direction. The teaching in a large number of schools is now specially arranged to suit these Examinations; and in many schools which do not send in Candidates, the course of study set forth in the Regulations is followed and the appointed books are read. Local Boards have instituted prizes for the most distinguished candidates at their particular centre of examination; one College in Cambridge (St John's) offers Sizarships, with £30 a year added, to the best candidates; statesmen appear at public meetings to distribute the prizes and add *éclat* to the successful exertions of the youthful candidates; formal notice is taken of the Examinations by Regulations of the Councils

presiding over the great Professions¹; and it is now a usual thing for Bank Managers and Merchants to require a "Local" Certificate as an evidence that persons applying for clerkships have made fair progress in their studies. The University allows students who have obtained certificates in certain branches of the Local Examination work, to become candidates for the degree of Bachelor of Music and to be excused part or the whole of the Previous Examination. The zeal with which persons interested in the education of girls have taken up the Local Examinations, and the success which girls have achieved, are worthy of very high praise.

It is not asserted that these Examinations supply all that is wanted for the Schools which are within their scope. They cannot do all that regular inspection might do, for they do not test actually and directly the teaching throughout the schools which send pupils to them. A master may choose to send in only his best boys, in which case it might be urged that the result of the Examinations is not a good criterion of the efficiency of the school. High honours obtained by a few boys

¹ Students who have passed the Cambridge (or Oxford) Examinations are exempted by the General Council for Medical Education from any other preliminary examination; by the Commissioners for regulating the examination of persons proposing to enter into articles of clerkship to attorneys or solicitors from any further examination in general studies; and by other bodies in like position with respect to other professions and occupations.

might raise a suspicion that the great mass of the school has been to some extent neglected while special care has been bestowed on a few of the best boys. It is worth while to consider how far such objections are likely to correspond to facts.

Inspection is not precluded by the present scheme. On the contrary, the Local Examinations Syndicate are authorised to entertain applications for the appointment of one or more persons to examine the scholars of any school making application and to report to the Syndicate. The number of schools submitting themselves to this inspection has for some years increased as rapidly as the number of the candidates for the Local Examinations has increased. In 1881 between 70 and 80 whole schools were thus examined, with an aggregate number of students little if at all short of the number examined at the last Local Examination, and the number of such schools now reaches 100 in the year.

But inspection itself does not answer the purpose for which the present scheme was established, which was in the first instance to improve rather than to test. It lacks the wide comparison with other schools throughout England which is so important a feature of the Local Examinations; it lacks the publicity and identity of test which shuts out local jealousies; it lacks the *éclat*—whatever that may be worth—which is given to individual success in the Local Examinations by the publication of the results on the part of the University.

In the Local Examinations, boys and girls from all parts of England go in to the same Examination, take the papers at the same time, have the same examiners, and appear in the same widely disseminated lists of success. It should however be understood that masters and parents may obtain a better idea of the general efficiency of a particular school from the report of an inspecting examiner than from isolated instances of success in the Local Examinations.

It is the largeness of the comparison which gives such a value to the Local Examinations as a test and stimulus. Boys in the same school do not easily rise far above their comrades, unless in some way a higher standard from the outside is brought plainly before them, to move their ambition while it shews them their deficiencies. And now that so many youths of promise and attainments stop short in their educational course without seeking to find their level in the higher lists of the University, it must be no small advantage to have an Examination in view by which they can give public proof of their training and abilities. To the master of a school the Examinations afford an opportunity of comparison and a stimulus to exertion of which the value can scarcely be overrated. And, what in many schools is of importance almost if not quite as great, the Regulations annually issued by the Syndicate provide a suitable curriculum of study for each year.

As a matter of fact, some schools make a rule

of sending in not picked boys but whole classes, and these have in several cases done the best. And although many do no doubt only send in a few boys, this does not of necessity imply any detriment to the boys who are not sent in. If good candidates are sent in, the master must be capable of teaching well; and if good candidates are frequently sent in, the other boys must be well taught, or there would be no constant supply of adequate material for the special training to take effect on. A very small amount of experience will shew a master that his best plan is to train the younger boys carefully, in readiness for future years, while he gives special instruction to the actual candidates and the classes of which they are members. The staff of masters is usually not so large as to allow the candidates to be treated in many of the subjects of examination as a class apart. The system encourages extra attention to the few candidates, rather than neglect of the many who are not candidates.

In larger schools it is both possible and desirable to send in the whole of the higher classes. It is a better test of the teaching both for the teachers and for the friends of the candidates; the preparation for the Examination is more easily harmonized with the general work of the school; the effect on all must be very much greater, for a high standard is thus brought fully before the whole school. In some large schools, a third of the whole school is annually sent up for examination.

In smaller schools, few as the number of boys sent in to the Examination may appear, they yet in many cases practically form whole classes. And if in some cases, whether of large schools or small, only a few picked boys come in, this may and often does imply caution on the part of the masters rather than real deficiency of general teaching. As the Examinations become better known in the school, more are sent to try their chances, and so much is this the case that it is now a prominent question with examiners and others whether it is desirable to send in idle or dull boys, with the great probability of failure, because they happen to be in the same class as other candidates. Until the University signifies its disapproval of the practice of sending in candidates who have practically no chance of passing—of which it has given no sign—the arguments are decidedly in favour of applying the stimulus to every boy in a class. Not to send in the less competent boys is to abstain from applying the stimulus to those who need it most. In the cases of new centres, and of schools which have not previously sent in candidates, it frequently happens that the work of the candidates is very decidedly condemned. The lesson thus learned is not forgotten, and another year sees an improvement. In such cases it is evident that the University has acted wisely in admitting all candidates without any reference to the probability of their failure or success. It may be as well to point out here that many candidates who fail to obtain a,

Certificate pass with much credit in some one or more branches of the Examination, and so far achieve a considerable measure of success.

On the whole, the plan recommended by the Syndicate and adopted by an increasing number of schools seems to meet the circumstances well. It is to this effect. The whole of the upper part of the school is sent in for the Local Examinations. In each year an examiner is sent by the Syndicate to the school, to examine or inspect the lower classes, which are not sent in for the Local Examination. This examiner is allowed to see the details of the marks gained in the Local Examination by the higher classes, and he makes his Report on the whole school on the information which he has gained by personal inspection of the lower part and by inspection of the results of the Local Examination in the upper part.

In the desire to render the Examinations as useful as possible to the authorities of the schools, the Syndicate has recently undertaken the issue of Reports on the work of individual students. On payment of a fee of one shilling a head, the master or mistress of a school receives a Report on the work of each student in each subject taken, describing it as very poor, poor, rejected, moderate, fair, good, or very good, and placing the students in the school in order of merit among themselves in each subject and in the whole examination. It is difficult to imagine anything more complete than this; and from the large number of applications for it

in each of the three years for which it has been given, it is clear that its value is understood. In the present year (1891) the Syndicate has sent Reports on the work of 2813 individual students.

The recognition accorded to the Examinations is now such that if a school, professing to educate any class of boys between National Schools and those regulated by the studies of the University, declines to send in candidates for examination, it may be considered either strong enough to do without them, or weak enough to dread them. Many schools which prepare a fair proportion of their students for the Universities send in candidates, and of late years some of the very highest honours of the University, both classical and mathematical, have been carried off by men who obtained their first successes years ago as Junior candidates in the Local Examinations.

The labour of conducting the Examination is so great that the University is hardly justified in continuing the work unless some clear and direct gain to its highest interests can be shewn. The work is very properly kept as much as possible in the hands of the residents, and they have already enough work to do in Cambridge without seeking work of a very laborious character from all parts of the kingdom. Something is wanted to make the Examinations more directly feeders to the University. This will be best supplied by the offer on the part of Colleges of exhibitions to be awarded by the results of the Examination. Colleges in

Oxford have for some years given such prizes, and the authorities report very well of the material thus obtained. St John's has set the example in Cambridge by giving two Sizarships in each year, with £30 added to each. Further progress in this direction would complete the link between the University and a very large class of the community now almost entirely outside its pale. The history of the country for centuries makes it clear that in this class are to be found intellects of the most robust character, and material in all ways most valuable to the University. If properly supported, the Local Examinations will more and more increase the area from which able men are drawn to Cambridge.

An opinion has been expressed in public discussions, outside the University, in favour of a recognition of these Examinations by the State. It has been suggested that all schools not under Government Inspection, and not of the highest grade, should be compelled to present a certain proportion of boys of certain ages. It is doubtful whether the work thus suggested would be fairly the function of the University, and it is also doubtful whether if such a requirement were made suddenly the Universities combined could support the strain. Still, if public opinion points unmistakably in this direction, and matters do not progress too rapidly, the University has resources from which to meet the demand. Non-resident members would be called in to the assistance of

the residents in increased proportion, and an able and experienced staff would be formed without serious difficulty. It has also been suggested that in view of the great difficulty now found in obtaining teachers for elementary schools under the increased demands of the Education Department, the University Senior Certificate should be accepted as a sufficient qualification so far as a knowledge of the subjects of instruction is concerned.

It was objected years ago by the Schools Enquiry Commissioners that these Examinations were expensive. This means no more than that the expense is felt directly by the individuals concerned, instead of appearing as an item in the estimates laid before Parliament. Government Inspection would be found expensive if payment for it were levied directly from the schools; and no Government Office could do the work done by the Cambridge Syndicate at nearly so little cost. It may be safely asserted that the student who pays his £1 to the Cambridge Syndicate has as much done for his pound as any other examining body in existence does for a like sum. The Scheme is self-supporting and nothing more than safely self-supporting. A reduction of the fee of each Candidate by only one shilling would convert the surplus into a deficit, and the University has no fund from which the scheme could be subsidised if it proved financially a failure. One great advantage of the system lies in the fact that the examiners

have other employments and only undertake the work of examination for three or four weeks in vacation. A system which paid annual salaries to permanent examiners with no other employment would be much more costly.

The Regulations for the Examinations may always be obtained free from the Secretary, whose address is "Syndicate Buildings, Cambridge." The present Secretary (1891) is Professor G. F. Browne, of St Catharine's College; Dr J. N. Keynes, of Pembroke College, has been appointed to succeed him at Easter, 1892. The Regulations are issued twelve months before the Examination, which at present takes place in the second or third week in December so as to be completed before Christmas. As soon as possible after the Examination, Class Lists are published, and at a later period a Report, with Tables which shew exactly in what subjects each candidate satisfied the examiners and in what subjects he failed. For a description of the more detailed Report on the work of each student, see page 42. A book containing the Examination Papers of the previous month is published in January and is a valuable guide in preparing for a future Examination.

It will be seen from the Regulations that the University has not sought to impose one precise course of work upon all schools and scholars, but has left a large field for the choice of master and pupil. Indeed the scheme is not drawn up from an *a priori* view of what schools ought to

teach, upon which point opinions differ widely, but it accepts the subjects actually taught in the schools, and confines the necessary qualifications for passing to a knowledge of the rudiments of education with the addition of two or three special subjects. By this means it meets the convenience equally of grammar schools and of "modern" schools, or of both departments of large schools. Great attention has been given of late to the regulations for the examination in Natural Science, and it is believed that the changes made in 1889 have successfully met the requirements of various kinds of schools in this increasingly important branch of study. The difficult question of Theology has been treated in a way which may fairly claim the merit of complete success. The scheme avoids making examination in Church formularies necessary for any candidate, by giving alternatives for the Church Catechism and the Book of Common Prayer. Further, it allows any parent or guardian to withdraw a student from the Theological part altogether by simply signing a printed "form of objection." The proportion of the candidates thus withdrawn is very small indeed. The Oxford scheme originally made the Prayer-book an essential part of the Examination, and did not permit the Theological part of the Examination to have any weight in arranging the order and classes of successful candidates: but the number of those who declined the Theological part of the Examination was so large (viz. 36 per cent.), that the

scheme was afterwards approximated to the Cambridge plan. The Cambridge Syndicate has taken the further step of allowing Candidates of the Jewish faith to take a second paper in additional books of the Old Testament in place of the paper in the New Testament. In this case credit is given for knowledge of the Hebrew text, as for knowledge of the Greek text in the paper on the New Testament.

Opinion is divided as to the wisdom of giving special books in French, German, Latin, and Greek, for the examination of students some of whom are close upon eighteen years of age. On the one hand, there is a fear that masters may take more pains to teach such students the translation of a special book than to teach them broadly the language in which it is written. On the other hand, more precise and accurate knowledge is to be looked for when the attention is confined to one or two books for the special purposes of the Examination, and it is probable that a higher standard of actual proficiency may be expected and maintained. On the whole, it is perhaps well that the two systems should both continue to receive recognition as at present. A good master will teach his students well; a less competent master, or a less able boy, is better employed in working at one special book. Many good masters are of opinion that there is special value in making a boy know one book thoroughly from beginning to end, with all its allusions and references, historical and geographical.

Greater facility in translation is acquired by a less restricted area of preparation, but the collateral matter is in this case often neglected, and the sense of thoroughness is less clearly developed. The Cambridge Syndicate have recently introduced at two steps an important change in this respect. Some years ago they began to set about one-third of each translation paper in each of the four languages from books other than those specified, and refused the special mark of distinction to all who did not do fairly well in this part of the work. They have now given to all students the option of being examined in French and German without preparing the books specially set for examination. In Latin and Greek they give to Senior students the option of taking papers in "Higher Latin and Greek," instead of the ordinary papers on the set subjects. In French and German the standard is intended to be the same in the two alternatives; in Latin and Greek, the Higher papers require a higher standard, and in this way the needs of Classical Schools are met.

It must be remembered that a certificate is worth exactly what it bears on the face of it. A Cambridge certificate which includes among other subjects a language or a science will compare on equal terms with any other certificate testifying to acquirements in the same branches of study. A certificate which does not include a language or a science cannot be—so far as that special deficiency is concerned—as good as another certificate which

has not such a deficiency. It has been held, but the opinion is less widely held now, that no certificate should be given to students who do not give evidence of successful training in language or science. But the number of those who enter for neither is very small, and there is no proof that any of these have had no teaching whatever in language or science. Some years ago, when a calculation was made, about 60 Junior candidates out of 2,200 entered neither for language nor for science. In December, 1881, out of 2,237 Junior boys and 1,144 Junior girls who obtained certificates, only 119 boys and 53 girls obtained the lowest grade of certificate, for English subjects only; and a very large proportion of these were examined in language or science but failed. Thus the system which Cambridge first adopted, and other bodies have adopted since, does not appear to have the effect of tempting candidates to neglect the study of language or science or both, while it does admit to the advantages of competition and comparison the better pupils of schools which only aim at a complete "English education." Schools are thus brought within the influence of the University which would otherwise be entirely beyond the pale.

It has been asserted that the stimulus of these Examinations has led to over-work on the part of students and over-forcing on the part of teachers. Whatever system of fostering and encouraging study is adopted, there is a risk of excess in these

directions. Study involves the possibility of over-study. Nothing but care and common-sense are needed as preventives, and these cannot be applied by a public body ; it must rest with parents and teachers to regulate the amount of work each student does. The Syndicate is careful to impose a limit to the number of subjects a student may take, but the Syndicate cannot prevent an unwise teacher over-working a delicate student. If the amount allowed by the Syndicate for the average student is judiciously diminished by the teachers in the case of those whose powers of work are weak, no harm will be done.

It has been asserted also that the Time Table is over crowded. Very great care has been taken in this respect, and it will be found on investigation that with a reasonable exercise of discretion on the part of teachers in special cases, the week of examination need not oppress any student.

The question of granting the title of A.A. or A.C., *Associate in Arts*, or *Associate of Cambridge*, has been referred to, see page 33. It was fully discussed at the time when the Examinations were being instituted. The decision of Cambridge not to grant such a title put an end to the proposal that the two Universities should act in concert in conducting Local Examinations. The unwillingness to grant a quasi-title of degree, and to grant it to a student who has never personally come under the eye of the University or given any proofs of moral character and conduct, seems

neither unnatural nor unwise. Students who have passed the Cambridge Examination are at liberty to use any letters they please after their name to signify the fact, such as C.S.C., *Certificated Student, Cambridge*, but the University has shewn no signs of reconsidering its decision not to authorise any such form. There can be no doubt that the number of Senior candidates examined by Oxford as compared with the number of Juniors is considerably in excess of the corresponding proportion in the Cambridge Examination, while the whole number of students examined by Cambridge is very greatly in excess of the number examined by Oxford; the grant of the title A.A. is usually given as one reason for this larger proportion of Seniors.

It was mentioned at the outset that girls have been admitted to these Examinations since 1865, and have in many cases achieved great success. The number of these candidates increases more rapidly than the number of the boys, and at present about two-fifths of the whole number of candidates entered are girls. It is especially among the Senior students that the proportion of girls is large; thus in 1890 there were 1405 Senior girls and only 542 Senior boys. This is explained in great measure by the fact that boys are taken from school earlier than girls, to be put into offices, &c.

HIGHER LOCAL EXAMINATIONS.

IN 1869, the Local Examinations Syndicate instituted an annual Examination for Women above the age of eighteen years. There were three classes of students to whom such an examination would evidently be a boon, while all would be guided in their studies and incited to regular work. Those who intended to become governesses and could obtain the certificate of the University would enter their profession with a very valuable introduction. Those who, having no such intention, were unwilling to cease to be students when they left school or passed from the hands of the governess, would have an object for which to work, something to save them from falling into desultory habits of reading. And in many cases where direct education had not ceased at eighteen, the highest part of a young woman's education could be tested by such an examination, when she could no longer be admitted to the Local Examinations on account of her age. This examination has made very satisfactory progress. Already the Cambridge certificate is of great and recognised value to governesses and teachers, while the careful

training the candidates must have gone through cannot but have a happy effect upon the educational character of the instruction they give. It was found some years ago, when enquiry was made, that not more than one-third of the whole number of candidates were engaged in tuition or were preparing for that profession, so that the Examination has large uses beyond that of training and certificating teachers. The number of entries in each year now exceeds 1000.

The Examination is held in June. But in order to suit the convenience of candidates a supplementary Examination (in the Languages and Mathematics only) is held in December. The Syndicate now allow candidates to be examined in December at any centre where there is a Local Examination for girls; this extension of the Examination has been found to be a great convenience.

The University allows the certificate of this Examination to count instead of the Previous Examination, for the admission of students of Girton and Newnham Colleges to Tripos Examinations.

The Examination for Women has been opened to Men above 18 years of age. The original purpose of this extension, the importance of which may prove to be great, was to further and simplify the work of the new Syndicate to whose care the establishment of courses of Lectures in populous places was committed, a work now combined with

that of the Local Examinations Syndicate. It will be seen, however, that the effects of the step may reach much further than this. Schoolmasters who have no University degree, will naturally seek to obtain the certificate of having passed the Higher Local Examination. Others, who by making some sacrifice could give the necessary time for residence for a degree, will have a reliable means of testing their powers before entering the University. It is to be hoped that the Examination may lead in some cases to the discovery of abilities of a high order among those who without such encouragement would not have thought of a University course. The published Regulations shew that the Examination embraces a very large number of subjects of study, among which a free choice is given to candidates, while a reference to the Book of Examination Papers will shew that the subjects must be prepared in an intelligent and thorough manner. A high standard is maintained by the Examiners.

LOCAL LECTURES.

A Syndicate, appointed to arrange Courses of lectures in populous towns and to provide Lecturers, has now for some years been combined with the Local Examinations Syndicate. Particulars may be obtained from the Secretary, Syndicate Buildings, Cambridge. Mr Arthur Berry, of King's College, has been appointed to succeed

Professor Browne in this office. The work done in this branch is of a very important character and has led to the establishment in Sheffield, Nottingham, and elsewhere, of local Colleges on a large scale. By the New Statutes of the University, such Colleges can be affiliated to the University on terms highly advantageous to their students. By a further extension of this privilege, Lectures Centres where there is no Local College can be affiliated to the University on equally advantageous terms.

OXFORD AND CAMBRIDGE BOARD.

A Syndicate has been appointed to conduct, in concert with the University of Oxford, the Inspection and Examination of Highest Grade Schools, both boys' and girls'. Particulars may be obtained from E. J. Gross, Esq., M.A., Caius College.

TRAINING OF TEACHERS.

A Syndicate has been appointed to encourage the study of the Theory, History, and Practice, of Education. Particulars may be obtained from O. Browning, Esq., M.A., King's College.

THE MEDIEVAL AND MODERN LANGUAGES TRIPOS.



THE Medieval and Modern Languages Tripos was established by Grace of May 15, 1884. By the regulations then given, which will remain in force till June 1893, the Tripos was divided into four Sections A (modern French and modern German unseen translation and composition), B (French; with Provençal and Italian), C (German; with Old Saxon and Gothic), D (English; with Anglo-Saxon and Icelandic). Each candidate had to take Section A and one of the three other Sections, and no one was allowed to pass in the Tripos, unless he had satisfied the examiners both in A and his special subject. Whatever were the merits of the scheme, it did not satisfy all the persons interested in the study of Modern Languages. The medieval and philological element was said to be prominent in it at the expense of the modern and literary element. It was thought inexpedient that every candidate, whatever lan-

guage he had chosen for his special subject, should be required to pass in an examination in modern French and modern German. The exclusion of phonetics from the Tripos was regretted. Both the literary and the medieval and philological elements were found to be inadequately represented in the English Section, and it appeared that the amount of literary history included in the French Section was too large to lead to much more than the 'getting up' of outlines.

After having carefully considered the desirability of a change in the regulations the Board for Medieval and Modern Languages proposed, in a Report presented to the Vice-Chancellor for publication to the Senate¹, a new scheme, which was publicly discussed² and, amended in a few details³, passed by Grace of the Senate on October 22, 1891⁴.

The first examination under the new regulations will take place in the Easter Term, 1894. The Tripos will be divided into six Sections, English being the chief subject of the first (A) and second (B), French of the third (C) and fourth (D), German of the fifth (E) and sixth (F). Every candidate has to offer himself for examination in two sections, unless he has pre-

¹ See *University Reporter*, May 19, 1891, pp. 841—846.

² On May 27, 1891. See *University Reporter*, June 2, pp. 906—909.

³ See *University Reporter*, June 24, pp. 1127—1133.

⁴ See *University Reporter*, October 27, p. 129, Graces 2, 3, 4.

viously obtained Honours in this or any other Tripos, in which case he may take one section only. A, C, and E represent especially, though not exclusively, the modern and literary side of English, French, and German; B, D, and F especially the medieval and philological side of the same and some cognate languages. In A, C, and E questions of a literary and critical character will be asked on a number of representative works of literature selected by the Board. In A a special paper is assigned to Shakespeare, and another one to Chaucer; one paper and a half deal with English authors not earlier than 1500, exclusive of Shakespeare, and two papers and a half with English writings earlier than 1500, exclusive of Chaucer. In C and E three papers bear upon modern French and modern German authors respectively. C includes, besides, papers in French composition, French grammar, and medieval French, and an optional examination in modern French pronunciation, whilst E includes papers in German composition, German grammar, and medieval German, and an optional examination in modern German pronunciation. As grammar and philology are not altogether excluded from A, C, and E, so literary history is to some extent included in B, D, and F. The fact is that literature and language cannot be studied quite apart from each other, though the one or the other may be made the principal or the subsidiary subject. Philology is represented in B, D, and F especially by a

paper on historical grammar. B includes three papers in medieval English, D two papers in medieval French, F three papers in medieval German. To cognate languages are assigned two papers in B (in Icelandic, Gothic, and Anglo-French), three papers in D (in Provençal and either Italian or Spanish with early Portuguese), and two papers in F (in Old Saxon, Middle Low German, and Gothic).

The details of the scheme and regulations are as follows :

1. The Examination for the Medieval and Modern Languages Tripos shall be divided into six Sections A, B, C, D, E, F.

2. In each Section six papers of three hours each shall be set as follows :—

SECTION A.

(1) Passages from specified and unspecified works of Shakespeare for explanation and discussion ; with questions and subjects for essays on language, metre and literary history.

(2) Passages from specified and unspecified English authors not earlier than 1500, exclusive of Shakespeare, for explanation and discussion ; with questions on language and literary history.

(3) (a) Passages from specified and unspecified English authors not earlier than 1500, exclusive of Shakespeare, for explanation and discussion ; with questions on language and literary history ;

(b) Passages from selected English prose and verse writings between 1200 and 1500, exclusive of Chaucer, for explanation and discussion; with questions on language, metre and literary history.

(4) Passages from selected English prose and verse writings between 1200 and 1500, exclusive of Chaucer, for explanation and discussion; with questions on language, metre and literary history.

(5) Passages from specified and unspecified works of Chaucer for explanation and discussion; with questions and subjects for essays on language, metre and literary history.

(6) Passages from selected prose and verse writings in the Wessex dialect of Old English for explanation and discussion; with questions on language, metre and literary history.

SECTION B.

(1) Passages from English prose and verse writings between 1100 and 1400 for explanation and discussion; with questions on language and literary history.

(2) Passages from prose and verse writings in Old English earlier than 1100 for translation and explanation; with questions on language, metre and literary history.

(3) Passages from selected writings in Old English for translation and explanation; with questions on language, metre and literary history.

(4) (a) Passages from selected writings in Anglo-French for translation and explanation; with questions on language;

(b) Passages from selected writings in Icelandic for translation and explanation; with questions on language.

(5) Passages from Wulfila for translation and explanation; with questions on the Gothic language.

(6) Questions on historical English grammar (including phonology, morphology and syntax), and on the principles of Teutonic philology as applied to the languages included in this section.

SECTION C.

(1) Passages from English authors to be translated into French, and subjects for original composition in French.

(2) Passages from French authors not earlier than 1500 for translation and explanation; with questions on language, metre and literary history immediately arising from such passages.

(3) Passages from selected French writings not earlier than 1500 for translation and explanation; with questions on language, metre and literary history.

(4) Passages from selected French writings earlier than 1500 for translation and explanation; with questions on language, metre and literary history arising from such passages.

(5) Passages from selected French writings, not earlier than 1500, for translation, or explanation and discussion, with special reference to literary history.

(6) (a) Questions on the grammar of modern French, including metre ;

(b) Questions on the elements of historical French grammar (including phonology, morphology and syntax).

Candidates may also be examined in the pronunciation of modern French by reading aloud and writing from dictation, and the results of this examination shall be indicated by some convenient mark affixed to the names of those who show proficiency, but shall not influence the Class-List.

SECTION D.

(1) Passages from French authors earlier than 1500 for translation and explanation ; with questions arising from such passages on language and metre.

(2) Passages from selected French writings earlier than 1500 for translation and explanation ; with questions on language, metre and literary history.

(3) Passages from selected Provençal writings for translation and explanation ; with questions on language, metre and literary history.

(4) (a) Passages from Provençal authors for translation and explanation ; with questions arising from such passages on language and metre ;

(b) Passages from selected writings in Italian (inclusive of dialects) earlier than 1300 for translation and explanation; with questions on language, metre and literary history; **or** Passages from selected Spanish and Portuguese writings earlier than 1350 for translation and explanation; with questions on language, metre and literary history.

(5) (a) Passages from selected Italian writings later than 1300 for translation and explanation; with questions on language, metre and literary history; **or** Passages from selected Spanish writings later than 1350 for translation and explanation; with questions on language, metre and literary history;

(b) Passages from Italian authors for translation and explanation; with questions arising from such passages on language and metre; **or** Passages from Spanish authors for translation and explanation; with questions arising from such passages on language and metre.

(6) Questions on historical Romance grammar (including phonology, morphology and syntax), with special reference to the languages included in this section.

SECTION E.

(1) Passages from English authors to be translated into German, and subjects for original composition in German.

(2) Passages from German authors not earlier than 1500 for translation and explanation; with questions on language, metre and literary history immediately arising from such passages.

(3) Passages from selected German writings not earlier than 1500 for translation and explanation; with questions on language, metre and literary history.

(4) Passages from selected writings in Old and Middle High German for translation and explanation; with questions on language; metre and literary history arising from such passages.

(5) Passages from selected German writings, not earlier than 1500, for translation, or explanation and discussion, with special reference to literary history.

(6) (a) Questions on the grammar of modern German, including metre;

(b) Questions on the elements of historical German grammar (including phonology, morphology and syntax).

Candidates may also be examined in the pronunciation of modern German by reading aloud and writing from dictation, and the results of this examination shall be indicated by some convenient mark affixed to the names of those who show proficiency, but shall not influence the Class-List.

SECTION F.

(1) Passages from Middle High German authors for translation and explanation; with questions arising from such passages on language and metre.

(2) Passages from selected Middle High German writings for translation and explanation; with questions on language, metre and literary history.

(3) Passages from specified and unspecified Old High German writings for translation and explanation; with questions on language, metre and literary history.

(4) Passages from specified and unspecified Middle Low German and Old Saxon writings for translation and explanation; with questions on language, metre and literary history.

(5) Passages from Wulfila for translation and explanation; with questions on the Gothic language.

(6) Questions on historical German grammar (including phonology, morphology and syntax), and on the principles of Teutonic philology as applied to the languages included in this section.

3. A student may be a candidate for Honours in the Medieval and Modern Languages Tripos if at the time of the examination he be in his fifth term at least, having previously kept four terms;

provided that nine complete terms shall not have passed after the first of the said four terms, unless the student shall have previously obtained Honours in this or some other Tripos, in which case he may be a candidate provided that twelve complete terms shall not have passed after the first of the said four terms.

4. No student of a different standing shall be allowed to be a candidate for Honours in this Tripos unless he shall have obtained permission from the Council of the Senate.

5. No student shall be a candidate for Honours in this Tripos on more than two occasions.

6. Every candidate shall offer himself for examination in two, but not more than two, of the sections A, B, C, D, E, F unless he has previously obtained Honours in any Tripos or in any part of this or any other Tripos, in which case he may offer himself for examination in one section only, or in two sections, but not in more than two.

7. No student who has once passed the examination in any Section of this Tripos shall be allowed to present himself for examination again in the same Section.

8. No student who has once offered himself for examination in any Section of this Tripos and failed to pass shall be allowed to present himself on another occasion for examination in any Section.

9. A student who shall obtain a place in the

class-list not earlier than his eighth term of residence shall be entitled to admission to the degree of Bachelor of Arts, provided that he shall have kept the requisite number of terms at the time when he applies for the degree.

10. A student who shall obtain a place in the class-list earlier than his eighth term of residence shall be entitled to be excused the General Examination for the B.A. degree.

11. The examination shall begin on the Monday after the last Sunday in May: but if Ascension Day fall on one of the days fixed for the examination, there shall be no examination on Ascension Day, and the examination shall begin on the Saturday before the last Sunday in May. The hours of attendance shall be from nine to twelve in the morning and from half-past one to half-past four in the afternoon.

12. The examination in Section C shall take place concurrently with that in Section F on the first three days of the examination, and the examination in Section D concurrently with that in Section E on the three days next following. The examination in Sections A and B shall take place on the six days next following (exclusive of Sunday); provided however that the examination in either of these last-named Sections may be held at the same time as the examination in two of the other Sections if none of the candidates to be examined in it wish also to be examined in either of such other Sections. The examination of any

candidate in the pronunciation of French or German shall not take place at a time when he is engaged in the written examination.

13. To conduct the examination six examiners shall be nominated every year by the Special Board for Medieval and Modern Languages, and elected by Grace in the Michaelmas Term preceding the examination. Of these six examiners, two shall be appointed to examine in Sections A and B, two in Sections C and D, and two in Sections E and F. Each of the six examiners shall receive twenty pounds from the University Chest. The Board shall also have power, in any year in which it may be necessary, to nominate an additional examiner or examiners to conduct the examination in the pronunciation of modern French and German, and such examiners shall receive such stipend as may be assigned to them by Grace on the recommendation of the Board.

14. The questions proposed by each examiner shall be submitted to all the examiners for approval. The answers to each question shall be examined, as far as possible, by both the examiners of the section.

15. A meeting shall be held of all the examiners at which the class-list shall be drawn up in accordance with the joint result of the examinations in the several Sections. The names of those candidates who deserve Honours shall be placed in three classes, the names in each class being arranged in alphabetical order.

16. The name of a candidate who under regulation 6 is required to offer himself for examination in two Sections shall not be placed in the class-list unless he shall so acquit himself in both Sections as in the opinion of the examiners in those Sections respectively to deserve Honours in them.

17. A candidate may be placed in the First Class for conspicuous merit in one Section provided that if he is required under regulation 6 to offer himself for examination in two Sections he shall so acquit himself in the other Section as in the opinion of the Examiners in that Section to deserve Honours in it.

18. In the case of every candidate who is placed in the First Class the class-list shall show by some convenient mark (1) the Section or Sections for proficiency in which he is placed in the First Class, and (2) the Sections (if any) in which he has passed with special distinction.

19. The class-list shall be published not later than 9 A.M. on the Friday after the second Sunday in June.

20. Public notice of all the variable subjects selected for the examination in any year shall be given by the Special Board for Medieval and Modern Languages before the beginning of the Michaelmas Term in the year next but two preceding the examination.

The first examination under these regulations shall be held in 1894.

Students who, having matriculated in 1890, take the existing Tripos in 1893, shall be permitted to offer themselves in 1894 for examination in one, or in two, of the three Sections B, D, F of the proposed Tripos; provided that a student who has taken Section D (English) in the Tripos of 1893 shall not be permitted to take Section B (English) of the proposed Tripos, nor a student who has taken B (French) in the Tripos of 1893 to take Section D (French) of the proposed Tripos, nor a student who has taken C (German) in the Tripos of 1893 to take Section F (German) of the proposed Tripos.

The subjects for 1894 are¹ :

SECTION A.

Shakespeare: *Love's Labour's Lost*; *A Midsummer Night's Dream*; *Romeo and Juliet*; *King John*; *Hamlet*; *The Tempest*.

Ascham: *Scholemaster*. Sir P. Sidney: *Apology for Poetry*.

Spenser: *Shepherd's Kalendar*. Ben Jonson: *Works* (to A.D. 1616).

Milton: *Comus*; *Samson Agonistes*; *Areopagitica*. Dryden: *Essay on Dramatic Poetry*.

Addison: *Essays* (in the *Spectator*) on Milton's *Paradise Lost*. Pope: *Essay on Man*.

Langland: *Piers the Plowman* (B text), Prologue and Passus I—VII.

¹ See *University Reporter*, November 10, 1891, pp. 171, 172.

Pearl. Cleanness. Patience. Gawain and the Grene
Knight. St Katherine.
Chaucer : Minor Poems.
The Anglo-Saxon Chronicle. Elene.

SECTION B.

The Old-English Version of Beda's Ecclesiastical History,
Books I. and II.
Béowulf.
The Anglo-French version of Horn.
Laxdæla Saga.

SECTION C.

La Satire Ménippée. Corneille's Plays (before A.D. 1653).
Miracles de Nostre Dame (Anciens Textes Français, Vol. 7) :
Clovis, Alexis.
Le Couronnement de Louis.
Boileau.
Taine : La Fontaine et ses fables.
Sainte-Beuve : Causeries du Lundi, vol. 7 (Regnard, Mon-
tesquieu, Mérimée, La Fontaine).

SECTION D.

Guillaume de Palerne. Récits d'un ménestrel de Reims.
Raoul de Cambrai.
Bertolome Zorzi. Ponz de Capduoill.
Monaci : Crestomazia Italiana, Part I.
Poema del Cid. Berceo : Milagros de Nuestra Señora.
Braga : Antologia Portuguesa, pp. 3—55.
Dante : Paradiso, Cant. i—xvii. Machiavelli : Prose Works.
Cervantes : Don Quijote, Part I. Calderon : La Vida es
Sueño.

SECTION E.

- Lessing. *Minna von Barnhelm*; *Hamburgische Dramaturgie* (Selection by O. Lyon).
- Schiller. Poems of the 3rd Period; *Wallenstein*; *Naive und sentimentalische Dichtung*.
- Goethe. Poems; *Hermann und Dorothea*; *Werthers Leiden*; *Wilhelm Meisters Lehrjahre*; *Goetz von Berlichingen*; *Iphigenie*; *Faust*; *Correspondence with Schiller from 1794 to 1799*.
- Goedeke und Tittmann: *Liederbuch aus dem 16ten Jahrhundert*.
- Hans Sachs: *Selected Poems*, ed. Kinzel.
- Hartmann von Aue: *Der arme Heinrich*.
- Bartsch: *Deutsche Liederdichter* I—X. XIV—XVI. XXI—XXII. XCVIII, 1—124.
- Braune, *Althochdeutsches Lesebuch* XVI—XVII. XXV—XXVII. XXXII, 1—14. XXXIII—XXXIV. XXXVI. XXXIX. XLIII.

SECTION F.

- Kudrun.
- Walther von der Vogelweide.
- Tatian I—XLV.
- Braune, *Althochdeutsches Lesebuch* XXVIII—XLIII.
- Gerhard von Minden.
- Heliand, 1—2088.

After having passed in the Previous Examination, which the student should endeavour to do as early as possible, he should consult his tutor and lecturers about a course of reading for the Tripos. Though certain general rules may be laid down, it will be advisable in individual instances to modify them in some respects. In any case, the student

should avoid studying many books and subjects at one time, and divide his work and time so as to reserve for revision and keep clear of fresh work at least the last ten weeks before the Tripos Examination.

Set Authors and Literary History.

Questions on literary history will be asked in connection with the various set authors in all the papers of Section A, in paper 3 of Section B, in papers 3, 4, 5 of Sections C and E, in papers 2, 3, 4 (*b*), 5 (*a*) of Section D, and in papers 2, 3, 4 of Section F. The first thing will be for the student to read the authors or books themselves without seeking for any other help than that of his dictionary and grammar. After having endeavoured to master the text, to understand the book in its single parts and taken as a whole, to make out the object of its author, to trace the plan, arrangement and chief points of the matter, and to mark peculiarities in language, style, and metre, he should have recourse to introductions, commentaries, criticisms, and works on literary history in order to clear up any remaining difficulties and doubts, to correct his own observations, to connect the book with historical circumstances or events, to assign to it a place in the literary career of its author, to arrive at an accurate estimation of its importance in the history of literature and at a just appreciation of its artistic value. The same

method should be applied, at least in its main points, to the more important among the not specified authors of English literature by candidates for Section A, of medieval English literature by candidates for Section B, of modern French literature by candidates for Section C, and of modern German literature by candidates for Section E. Only thus a real insight into the historical development of literature can be gained; information gathered from handbooks and not confirmed by the student's own readings and observations is of comparatively little value.

Translation.

A good translator must master both his own language and the language from which he translates. Hence it will not suffice for the student to read foreign authors, but he must attentively peruse some of the great English prose and verse writers, historians, critics, and novelists, commit to his memory pieces of striking excellence, and learn to know and use the words, turns of expression, and constructions appropriate to the different styles of writing. In translating his object will be to render faithfully and accurately the original and to imitate its style and tone; at the same time, what he writes must be correct, idiomatic, and intelligible English. If the passage set for translation is of a purely or chiefly philological interest, which is the case with some medieval texts, a

literal, but intelligible rendering will be rather expected than an elegant one.

Composition.

Subjects for essays in English will be given in papers 1 and 5 of Section A, and subjects for original composition in French and German in paper 1 of Sections C and E respectively. The chief points to be aimed at in writing an essay or original composition are accuracy of thought, purity and lucidity of style, method and clearness in the arrangement of the matter. An attentive study of standard writers and much practice, if possible, under the guidance of a teacher, are the means by which the student may attain skill and facility in this subject. Candidates for Sections C and E may be advised to give to the translations from English into French and German respectively not more than two of the three hours allowed for paper 1, and to reserve at least one hour for original composition.

The same principles naturally apply to translating from English into foreign languages as from foreign languages into English. Accuracy and clearness, grammatical correctness and idiomatic expression are the principal things to be kept in view. Most students will require a considerable amount of instruction and self-training to arrive at some perfection in this respect. Among the methods of self-training stands foremost the re-translating of previously translated passages from

standard French and German authors. There should be some variety in the character of the extracts selected for this purpose. Let an account of some historical event be followed by a philosophical argumentation, a description of rural or other scenery by a sketch of a great man's life or a criticism, etc. Thus the student will become familiar with terms and phrases suitable to different styles. He may also be advised, after translating an extract from an English author into French or German, to consult a good French or German translation and compare with it his own translation. This process will often lead him to discover difficulties and differences of usage between his own and the foreign language which would otherwise have escaped him. Again, committing to memory pieces in verse and prose is an often recommended practice, which ensures an easy recollection of foreign words, phrases, idioms and syntactic usages. It is a matter of course that extensive and careful reading of modern French and German authors will increase the student's power of writing French and German. It is not useless, however, to add that the usage of not contemporary and even of some contemporary authors should not be imitated in all cases. Some turns of expression which were frequently used only a hundred years ago are unusual at the present day; others, though occurring in works of living writers, may be affected, provincial, or vulgar.

Modern French and German Grammar.

Both the student of literature and the translator from and into French and German will expose themselves to more or less serious blunders without a thorough knowledge of grammar, including spelling, accidence, and syntax. Candidates who, after an attentive study of grammar, desire to test their familiarity with the subject, may be advised to use examination papers or books containing grammatical questions, or to translate the examples of syntactic usage given in their grammars and to retranslate them frequently into the original language. The candidate for Sections C and E will require more than a merely practical knowledge of modern French and German grammar. He must be able to discuss the more difficult problems methodically, correctly, in precise and unambiguous terms, and to illustrate his statements by judiciously chosen instances.

Metre.

There are several papers in each Section of the Tripos in which questions on metre will be asked. After having acquainted himself with the principles of this subject by the use of a good handbook, the student cannot find a better method of fixing in his memory the various forms, rules, and details than learning by heart pieces in verse illustrative of them.

Modern French and German Pronunciation.

It is desirable that most students of modern languages and especially those who look forward to the teaching of them as a profession should offer themselves for examination in modern French and German pronunciation. Though men possess in different degrees the capability of catching and imitating varieties of sound, rhythm, stress, and tone, defects may be remedied to some extent by the study of handbooks of phonetics and a systematic training of the ear and speech-organs. Every opportunity of hearing French or German spoken by natives should be used, and serious students cannot be too strongly advised to stay abroad and live with foreigners for some time.

Historical Grammar.

All the Sections of the Tripos, except A, include papers in historical grammar, and even in A questions on historical grammar are not excluded. In C and E more elementary questions on the historical grammar of French and German will be asked. In B, D, and F a fuller knowledge of the historical development of certain groups of languages will be expected. Candidates for C and E may begin the study of this subject with acquiring a merely practical knowledge of medieval French and medieval German by learning from a grammar the pronunciation and paradigms, and

by reading some texts. The study of books on historical grammar will be especially profitable and interesting for him who has mastered the old and modern inflexions and forms of words. He learns how to connect the facts with which he is already familiar, and how to apply general principles to the variety of changes with which he has met. Last of all the student should take up the systematic study of historical syntax. Before he does so, he should have read texts from different periods of the language and endeavoured to find out himself, with the help of his dictionary and grammar, in what respects the syntactic usage of former times differs from that of the present day. With regard to the derivation of words, etymological dictionaries and those chapters in grammars which deal with the formation of derivatives and compounds should be often consulted.

The same general course of study may be recommended to candidates for Sections B, D, and F, but they will be expected to pay greater attention to the more minute details in the historical development of English, French, and German respectively, and to gain broader views and a more solid judgment about its problems by connecting it with that of certain cognate languages. The languages included in those Sections should be taken up successively, perhaps best in the following order. B: Old English, Middle English, Anglo-French, Gothic, Icelandic; D: Old French, Italian or Spanish with early Portuguese, Proven-

çal; F: Middle High German, Old High German, Gothic, Old Saxon, Middle Low German.

The study of general books on language and the principles of its life will prove very useful both to beginners by awaking their interest in the subject and to more advanced students by guarding them against the danger of overestimating minutiae.

The new regulations allow a student who has obtained honours in two Sections of the Tripos at the end of his second or third year to offer himself for examination in one or two other Sections at the end of his third or fourth year. This gives him an opportunity of completing his knowledge of the medieval or modern languages in whatever direction he chooses. It should, however, be observed that he cannot be examined in the same year in both C and F or in both D and E (see Regulation 12).

Also students who have obtained honours in any other Tripos or in any part of another Tripos at the end of their second or third year may offer themselves for examination in one or two Sections of the Medieval and Modern Languages Tripos at the end of their third or fourth year or at the end of both.

It is probable that students of Classics or History will take advantage of this permission more frequently than students of other subjects.

In many cases the historical development of the modern languages and literatures offers parallels to that of the ancient languages and literatures, and may be used to illustrate and throw light on the latter¹. On the other hand, there is no better preparation for the study of medieval and modern European literature than that of the classics, to whom it owes so much of its matter, spirit, and form. Again, the philology of the medieval and modern languages will be more successfully studied by a man who masters the classical languages than by one who is little versed in them. French and the other Romance languages are nothing but the modern forms of Latin, and the object of Romance philology is to determine the principles and nature of the changes presented by them. Moreover, both Greek and Latin are sisters of the primitive

¹ Cf. W. v. Hartel, *Über Aufgaben und Ziele der classischen Philologie*, Wien 1890, p. 27 'das Studium moderner Literaturen, deren Prozesse sich aus einer Fülle von Documenten klarer darlegen lassen, wird die historische Causalerklärung antiker Werke fördern, indem dasselbe jene literarischen Erfahrungen, Möglichkeiten und Analogien allein in solcher Vollständigkeit zu bieten vermag, um die überall klaffenden Lücken der Überlieferung zu füllen, die richtige Verwerthung unserer Observationen zu bestimmen, versuchte Hypothesen zu controliren...Der Literaturhistoriker wandelt hierin auf dem Wege des Naturforschers, der die vor seinen Augen sich abspielenden Vorgänge zunächst genau verfolgt, um Prozesse, welche seiner Beobachtung entrückt sind, zu begreifen.' Precisely similar remarks might be made about the study of modern languages.

Teutonic language from which the various Teutonic idioms have sprung. Lastly, even those who take a greater interest in the practical than in the philological study of modern languages will owe to a previous training in the classical languages a development of their analysing and reasoning powers which cannot but benefit their efforts to master new languages.

The student of History will be chiefly attracted by the literature of nations and periods with the political history of which he is already acquainted. Any one who wishes to obtain a clear view of the intellectual and social life of a time cannot possibly pass by the works of literature which that time has produced and in which it is faithfully mirrored.

It is very desirable that such students of Classics, History, or other subjects as wish to be examined in part of the Medieval and Modern Languages Tripos at the end of their third or fourth year should devote some time and energy to the subjects of the selected part even before passing in their first Tripos, and that they should, as early as possible, consult their tutors and lecturers about the best division of their time.

Students should not consider the Vacations only as times of leisure and rest. They will have plenty to do with revising the work of the preceding term and completing and extending their know-

ledge. Those who do not come up to Cambridge for the Long Vacation Term to use the libraries or to read with private tutors will probably do best in spending the whole or part of the Vacation abroad, where they will find ample opportunity of accomplishing themselves in the modern languages. Let not, however, any one imagine that the mere stay in a foreign country will give him, in some miraculous manner, a mastery of the language there spoken or enable him to dispense with the study of grammars, the reading of authors and constant practice in composition.

Every year, about the end of the Easter Term, 'Intercollegiate Examinations in Medieval and Modern Languages' are held, which serve to give the student an idea of the kind of questions he has to expect in the Tripos Examination, and of his own ability to answer them. The subjects are published in the *University Reporter* in the Michaelmas Term preceding the examination¹. They are so selected as to show how students may best distribute their work over three years.

In several colleges examinations in modern languages for prizes, scholarships, and exhibitions are held.

¹ See *University Reporter*, December 1, 1891, pp. 265, 266.

Christ's College. 'The Rev. W. W. Skeat, M.A. (now Professor of Anglo-Saxon) in 1865 gave £100; the interest to be expended annually in a Prize of Books; to encourage the study of English Literature and Philology. The Examination takes place at the end of the Easter Term.'

Trinity College. 'In the year 1871 the sum of £600 was given by Alfred John Vidil, Esq., to found a Prize for proficiency in the French language and literature, to be called the Vidil Prize. Also in 1877 the sum of £500 to found a second Prize was given by a French gentleman of high rank, who desires that his name may not be made known. The Prizes are adjudged triennially after Examination.'

Gonville and Caius College, King's College, and Trinity College also have hitherto held examinations in modern languages for scholarships and exhibitions.

LIST OF BOOKS RECOMMENDED TO STUDENTS OF
 MEDIEVAL AND MODERN LANGUAGES¹.

Literature generally.

*Vapereau, Dictionnaire universel des Littératures.
 Vapereau, Dictionnaire universel des Contemporains.
 De Gubernatis, Dictionnaire international des Écrivains du
 jour.

¹ The latest editions should be used. * denotes books for beginners.

Bornmüller, Biographisches Schriftsteller-Lexikon der Gegenwart.

*Brewer, Reader's Handbook of allusions, references, plots, and stories.

*Wheeler, Noted Names of Fiction.

Gerber, Die Sprache als Kunst.

*Bain, Manual of English Composition and Rhetoric.

*Schuster, Lehrbuch der Poetik.

Language generally.

Max Müller, Lectures on the Science of Language.

Sayce, Introduction to the Science of Language.

*Whitney, Life and Growth of Language.

*Delbrück, Einleitung in das Sprachstudium (transl. into English).

G. v. d. Gabelentz, Die Sprachwissenschaft, ihre Aufgaben, Methoden und bisherigen Ergebnisse.

Paul, Principien der Sprachgeschichte (transl. into English).

*Strong, Logeman, and Wheeler, Introduction to the Study of Language.

Sweet, Handbook of Phonetics.

Sweet, Primer of Phonetics.

*L. Soames, Introduction to Phonetics.

Sievers, Grundzüge der Phonetik.

Vietor, Elemente der Phonetik.

Passy, Étude sur les changements phonétiques.

Subjects of Sections A and B.

*Questions for Examination in English Literature, by the Rev. W. W. Skeat (Bell and Sons, 1887).

The Introduction contains a long list of books necessary for the student of English, and, though not drawn up with a special view to the present Tripos, it mentions nearly all such works as it behoves the beginner to be acquainted with.

The following additions may be made to the list there given--

Section A.

1. Moulton, Shakespeare as a Dramatic Artist.

*Fleay, Shakespeare Manual.

2-5. *Ten Brink, Early English Literature.

*Körting, Grundriss der englischen Litteratur.

Körting, Encyclopaedie der englischen Philologie.

Einenkel, Streifzüge durch die mittelenglische Syntax.

Schipper, englische Metrik.

Stratmann, mittelenglische Grammatik.

Pearl, ed. Gollancz.

Later works in the Clarendon Press Series and in the Pitt Press Series.

*Skeat, Principles of English Etymology; two Series.

*Mayhew and Skeat, Middle English Dictionary.

*Stratmann, Middle English Dictionary; new ed. by Bradley.

Mätzner, altenglische Sprachproben.

Mätzner, altenglisches Wörterbuch.

5. *Skeat, Chaucer's Minor Poems.

*Skeat, Chaucer's Legend of Good Women.

*Ten Brink, Chaucer's Sprache u. Verskunst.

*Ten Brink, Chaucer-Studien.

4-6. Twelve Facsimiles of Old English Manuscripts, ed. Skeat.

Sweet, Hist. of English Sounds.

Sweet, Primer of Phonetics.

*Sweet, Primer of Spoken English.

6. Wülker, Grundriss z. Gesch. d. angelsächsischen Literatur.

Grein, Bibliothek der angelsächsischen Poesie.

*Bright's Anglo-Saxon Reader (H. Holt, New York, 1891).

Mayhew, Old English Phonology.

Section B.

4. (a). See books under C, 4, and D, 1 and 2.

*G. Paris, *Extraits de la Chanson de Roland*.

Chanson de Roland, ed. Gautier (with a glossary).

Behrens, *Beiträge zur Gesch. der franz. Sprache in England*.

Suchier, *Bibliotheca Normannica*.

4. (b). *Sweet, *Icelandic Primer*.

*Vigfússon and Powell, *Icel. Prose Reader*.

Noreen, *altisländische Grammatik*.

5. *Wright, *Primer of the Gothic Language*.

Balg, *Comparative Glossary of the Gothic Language*.

Feist, *Grundriss der gotischen Etymologie*.

6. *Morris, *Historical Outlines of English Accidence*.

Koch, *Grammatik der englischen Sprache*.

Mätzner, *englische Grammatik*.

And see the list above on "Language generally."

Subjects of Section C.

1. *Macmillan's *Course of French Composition* by G. Eugène-Fasnacht.

*Gasc, *Materials for French Prose Composition* (read pp. xii—xviii).

*Mariette, *Half-hours of French Translation*.

Boquel, *Exercises in French Composition for Advanced Students*.

*Roche, *Du Style et de la Composition littéraire*.

*Pellissier, *Principes de Rhétorique française*.

Dictionnaire de l'Académie française.

Lafaye, *Dictionnaire des Synonymes de la langue française*.

Boissière, *Dictionnaire analogique de la langue française*.

Translations of Locke by Thurot, *Goldsmith's Vicar of Wakefield* by Mme Belloc, *Scott* by Defauconpret,

Irving's Sketchbook by Lefebvre, Macaulay's Essays by Guizot, his History of England by Montégut, Emerson's Essays by Montégut.

3 and 5. The Histories of French literature by *Saintsbury, *Géruzez, *Fleury, *Petit de Julleville.

Sainte-Beuve, Causeries du Lundi.

Sainte-Beuve, Portraits littéraires.

Brunetièrre, Études critiques sur l'histoire de la littérature française.

Petit de Julleville, Le Théâtre en France.

Sainte-Beuve, Tableau historique et critique de la poésie française et du théâtre français au xvi^e siècle.

Darmesteter et Hatzfeldt, Le seizième siècle en France.

Tilley, Literature of the French Renaissance.

Birch-Hirschfeld, Geschichte der französischen Litteratur seit Anfang des xvi Jahrhunderts.

*Merlet, Études littéraires sur les classiques français.

*Faguet, Les grands maîtres du xvii^e siècle.

*Deschanel, Le Romantisme des classiques.

Despois, Le Théâtre français sous Louis XIV.

Vinet, Histoire de la littérature française au xviii^e siècle.

Hettner, Geschichte der französischen Litteratur im achtzehnten Jahrhundert.

Faguet, Dix-huitième siècle. Études littéraires.

Charpentier, La littérature française au xix^e siècle.

Faguet, Études littéraires sur le xix^e siècle.

Pellissier, Le Mouvement littéraire au xix^e siècle.

*Fortier, Sept grands auteurs du xix^e siècle.

Littré, Dictionnaire de la langue française.

Hatzfeldt et Darmesteter, Dictionnaire général de la langue française.

*Smith, Hamilton, and Legros, The International French and English Dictionary.

Lalanne, Dictionnaire historique de la France.

Chéruef, Dictionnaire historique des institutions mœurs et coutumes de la France.

4. *Clédat, Grammaire élémentaire de la vieille langue française.
Schwan, Grammatik des Altfranzösischen.
*Bos, Glossaire de la langue d'oïl.
- 6 (a). *Fasnacht, A synthetic French Grammar for Schools.
*Eve and De Baudiss, The Wellington College French Grammar.
Ayer, Grammaire comparée de la langue française (pp. 155—697).
*Chassang, Nouvelle Grammaire française. Cours supérieur.
*Storr, Hints on French Syntax, with exercises.
Boquel, Exercises in French Grammar, Homonyms and Synonyms for Advanced Students.
*Karcher, Questionnaire français.
*French Examination Papers set at the University of London, from 1839 to January, 1888, compiled and edited by Brette and Thomas.
Darmesteter et Hatzfeldt, Le seizième siècle en France.
Haase, Französische Syntax des xvii Jahrhunderts.
Darmesteter, Traité de la formation des mots composés dans la langue française.
Darmesteter, De la création actuelle de mots nouveaux dans la langue française.
*F. de Gramont, Les Vers français et leur prosodie.
- (b). *Clédat, Nouvelle Grammaire historique du Français.
*Darmesteter, Cours de grammaire historique de la langue française.
*Darmesteter, La Vie des mots.
Scheler, Dictionnaire d'étymologie française.

French Pronunciation.

- Passy, Les Sons du Français, leur formation, leur combinaison, leur reprézantacion.
*Passy, Le Français parlé.

*Clédat, Précis d'orthographe et de grammaire phonétique.
Lesaint, Traité complet de la prononciation française.

Subjects of Section D.

1 and 2. See books under C, 4.

Godefroy, Dictionnaire de l'ancienne langue française.

Carpentier-Henschel, Glossaire français (supplement to Du Cange's Glossarium Mediæ et Infimæ Latinitatis).

*Bartsch, Chrestomathie de l'ancien français.

*Paris, Extraits de la Chanson de Roland.

Bartsch et Horning, La Langue et la Littérature françaises depuis le ix^e siècle jusqu'au xiv^e siècle.

Tobler, Vermischte Beiträge zur französischen Grammatik.

Tobler, Vom französischen Versbau alter und neuer Zeit (transl. into French by Breul and Sudre).

Paris, La Littérature française au moyen âge.

3 and 4 (a). Raynouard, Lexique roman.

Stengel, Die beiden ältesten provenzalischen Grammatiken.

*Bartsch, Chrestomathie provençale.

Monaci, Testi antichi provenzali.

*Encyclopædia Britannica, Article *Provençal* (by P. Meyer).

Diez, Die Poesie der Troubadours.

Diez, Leben und Werke der Troubadours.

*Restori, Letteratura provenzale.

4 (b) and 5. *Sauer, Italian Conversation Grammar.

Fornaciari, Grammatica italiana dell' uso moderno.

Fornaciari, Sintassi italiana dell' uso moderno.

Vockeradt, Grammatik der italienischen Sprache.

Meyer-Lübke, Italienische Grammatik.

Encyclopædia Britannica, Article *Italian Dialects* (by Ascoli).

Casini, Sulle forme metriche italiane.

*Torraca, Manuale della letteratura italiana.

Monaci, Crestomazia italiana dei primi secoli.

*Encyclopædia Britannica, Article *Italian Literature* (by Bartoli).

- Gaspari, Geschichte der italienischen Literatur (transl. into Italian).
- Fornaciari, Disegno storico della letteratura italiana.
- *Baretti, Italian-English Dictionary.
- Petròcchi, Nòvo Dizionàrio della lingua italiana.
- Tommaseo e Bellini, Dizionario della lingua italiana.
- *Zambaldi, Vocabolario etimologico italiano.
- *Knapp, Grammar of the modern Spanish language.
- Bello-Cuervo, Gramática de la lengua castellana.
- *Encyclopædia Britannica, Article *Spain, Language* (by Morel-Fatio).
- Förster, Spanische Sprachlehre.
- Maury, Versificación y elocución.
- Lemcke, Handbuch der spanischen Litteratur.
- *Encyclopædia Britannica, *Spain, Literature* (by Morel-Fatio).
- Ticknor, History of Spanish literature (compare also the Spanish and German translations of it).
- *Puymaigre, Les vieux Auteurs castillans.
- *Neumann and Baretti, Dictionary of the Spanish and English languages.
- Salvá, Nuevo Diccionario de la lengua castellana.
- *F. de Lencastre, Nouvelle Méthode pour apprendre la langue portugaise.
- Coelho, A lingua portugueza.
- D' Ovidio e Monaci, Manualetti d' introduzione agli studj neolatini. II. Portoghese.
- *Braga, Antologia portugueza.
- Braga, Manual da historia da litteratura portugueza.
- *Valdez, Portuguese-English Dictionary.
- J. de Santa Rosa de Viterbo, Elucidario das palavras, termos e frases que em Portugal antiguamente se usárão e que hoje regularmente se ignorão.
- Coelho, Diccionario manual etymologico da lingua portugueza.
6. See books mentioned under C, 6.

- Encyclopædia Britannica, Article *Romance Languages* (by Storm).
- Gröber, Grundriss der romanischen Philologie (part of it transl. into French and publ. under the title 'Le Français et le Provençal par H. Suchier').
- Diez, Grammatik der romanischen Sprachen (transl. into French).
- Meyer-Lübke, Grammatik der romanischen Sprachen (transl. into French).
- Diez, Etymologisches Wörterbuch der romanischen Sprachen.
- Jarník, Neuer vollständiger Index zu Diez' etymologischem Wörterbuche der romanischen Sprachen.
- Thurneysen, Keltoromanisches.
- Körting, Lateinisch-romanisches Wörterbuch.

Subjects of Section E.

1. *Macmillan's Course of German Composition by G. E. Fasnacht.
 - *Buchheim, Materials for German Prose Composition.
 - *Lange, German Composition (Oxford. Clarendon Press).
 - *Regeln und Wörterverzeichnis für die deutsche Rechtschreibung.
 - *Duden, Vollständiges orthographisches Wörterbuch der deutschen Sprache.
 - Eberhard (—Lyon), Synonymisches Handwörterbuch der deutschen Sprache.
 - Andresen, Sprachgebrauch und Sprachrichtigkeit im Deutschen.
 - Heyne, Deutsches Wörterbuch (will be complete in 3 vols.).
 - Hoffmann (—Schuster), Logik, Rhetorik.
 - Laas, Der deutsche Aufsatz. Theorie und Materialien.
- 3 and 5. The Histories of German Literature by *Kluge, *Egelhaaf, *Roquette, Scherer.

- Gervinus, Geschichte der deutschen Dichtung. 5 vols.
 Goedeke, Grundriss der Geschichte der deutschen Dichtung.
 Second edition. 4 vols. (about 2 more to come).
 Koberstein, Geschichte der deutschen Nationallitteratur.
 5 vols.
 Hettner, Geschichte der deutschen Litteratur im xviii Jahrhundert. 3 vols. (Full Index by Grosse.)
 Gottschall, Die deutsche Nationallitteratur des xix Jahrhunderts. 2 vols.
 On Lessing: Danzel und Guhrauer; E. Schmidt.
 On Goethe: *Sime; *Browning; *Goedeke; Grimm;
 Schaefer; Düntzer.
 On Schiller: *Goedeke; Hoffmeister; Brahm; Minor;
 Weltrich.
 Düntzer, Erläuterungen zu den deutschen Klassikern.
 Bulhaupt, Dramaturgie des Schauspiels I. III.
 Editions of the Classics: Hempel's editions; Kürschner's
 Deutsche National-Bibliothek.
 Wackernagel, Lesebuch, Parts II—IV.
 M. Müller (—Lichtenstein), German Classics. 2 vols.
 Echtermeyer, Auswahl deutscher Gedichte.
 Kluge, Auswahl deutscher Gedichte.
 Goetzinger, Deutsche Dichter. 2 vols.
 Könnecke, Bilderatlas zur Geschichte der deutschen Nationallitteratur.
 Freytag, Bilder aus der deutschen Vergangenheit. 5 vols.
 (especially III—V).
 Grimm, Deutsches Wörterbuch (will be complete in 12 vols.).
 Sanders, Deutsches Wörterbuch. 3 vols. and Supplement.
 *Whitney, German Dictionary.
 Flügel, Deutsch-Englisches und Englisch-Deutsches Wörterbuch. 3 vols.
4. *Zupitza, Einführung in das Studium des Mittelhochdeutschen.
 *Wright, Middle High German Primer.
 Paul, Mittelhochdeutsche Grammatik.

- *Wright, Old High German Primer.
 *Braune, Abriss der althochdeutschen Grammatik.
 Lexer, Mittelhochdeutsches Taschenwörterbuch.
 6 (a). *K. Meyer, A German Grammar for Schools.
 *Eve, A School German Grammar.
 Brandt, A Grammar of the German Language for High
 Schools and Colleges.
 Gelbe, Deutsche Sprachlehre. 2 parts.
 Vernaleken, Deutsche Syntax. 2 parts.
 Schmeckeber, Deutsche Verslehre.
 (b) Behaghel, Die deutsche Sprache (English translation
 by Trechmann).
 Kauffmann, Deutsche Grammatik.
 Wilmanns, Die Orthographie in den Schulen Deutschlands.
 Erdmann, Grundzüge der deutschen Syntax nach ihrer
 geschichtlichen Entwicklung.
 Weigand, Deutsches Wörterbuch. 2 vols.
 Kluge, Etymologisches Wörterbuch der deutschen Sprache.
 (Elaborate Index by Janssen).

German Pronunciation.

- *Viotor, Die Aussprache des Schriftdeutschen.
 Viotor, German Pronunciation.
 Viotor, Elemente der Phonetik und Orthoepie des Deut-
 schen, Englischen und Französischen.

Subjects of Section F.

1. See E, 4.
 Weinhold, Mittelhochdeutsche Grammatik.
 Benecke, Müller und Zarncke, Mittelhochdeutsches Wörter-
 buch. 4 vols.
 Lexer, Mittelhochdeutsches Handwörterbuch. 3 vols.
 (Supplement and Index to the preceding.)
 Wackernagel, Geschichte der deutschen Litteratur. Vol. i.

- Koberstein, Geschichte der deutschen Nationallitteratur.
Vol. I.
- Goedeke, Grundriss zur Geschichte der deutschen Dichtung.
Vol. I.
- G. Paris, La littérature française au moyen-âge.
- Weinhold, Die deutschen Frauen in dem Mittelalter. 2 vols.
- Schultz, Das höfische Leben zur Zeit der Minnesinger.
2 vols.
- Schultz, Deutsches Leben im xiv. und xv. Jahrhundert I.
(Vol. II. is not yet published).
- *Wackernagel, Edelsteine deutscher Dichtung und Weisheit
im xiii. Jahrhundert.
- Wackernagel, Altdeutsches Lesebuch (with an elaborate
glossary).
- W. Grimm, Die deutsche Heldensage.
- Rassmann, Die deutsche Heldensage und ihre Heimat.
3. See books under E, 4, and F, 1 and 2.
- Braune, Althochdeutsche Grammatik.
- Franz, Die lateinisch-romanischen Elemente im Althoch-
deutschen.
- Raumer, Die Einwirkung des Christentums auf die althoch-
deutsche Sprache.
- Schade, Altdeutsches Wörterbuch. 2 vols.
- Ebert, Die Litteratur des Mittelalters im Abendlande.
Vol. III.
- Piper, Die älteste deutsche Litteratur bis um das Jahr 1050.
- Müllenhoff und Scherer, Denkmäler deutscher Poesie und
Prosa vom VIII—XI Jhd.
- Braune, Althochdeutsches Lesebuch.
- Heinzel, Der Stil der altgermanischen Poesie.
- Arndt, Über die altgermanische epische Sprache.
- J. Grimm, Deutsche Mythologie. 3 vols.
- E. H. Meyer, Germanische Mythologie.
4. Lübben, Mittelniederdeutsche Grammatik.
- Lübben und Walther, Mittelniederdeutsches Handwörter-
buch.

Schiller und Lübben, Mittelniederdeutsches Wörterbuch.
6 vols.

Gallee, Altsächsische Grammatik 1. (the Syntax will be
written by Behaghel).

Roediger, Paradigmata zur altsächsischen Grammatik.

5. *Wright, Primer of the Gothic Language.

Braune, Gotische Grammatik.

Douse, Introduction to the Gothic of Ulfilas.

Weinhold, Die gothische Sprache im Dienste des Kristen-
thums.

Schulze, Gothisches Glossar.

Balg, A Comparative Glossary of the Gothic Language.

H. Bradley, The Goths.

6. See the books mentioned under E, 6.

Paul, Grundriss der Germanischen Philologie¹. 2 vols.
(Vol. 2 not yet completed.)

J. Grimm, Deutsche Grammatik (Index by Andresen).

Socin, Schriftsprache und Dialekte im Deutschen.

Kluge, Von Luther bis Lessing.

v. Bahder, Grundlagen des neuhochdeutschen Lautsystems.

Müllenhoff (— Roediger), Paradigmata zur deutschen Gram-
matik.

Sievers, Paradigmen zur deutschen Grammatik.

Brugmann, Grundriss der vergleichenden Grammatik der
indogerm. Sprachen. Only 2 vols. and part of the 3rd
published as yet. Transl. by Wright and Conway.

Fick, Vergleichendes Wörterbuch der indogermanischen
Sprachen. 2 vols. (only Vol. 1. of the 4th edition
published as yet).

v. Bahder, Die deutsche Philologie im Grundriss.

¹ This very important work contains full information
with regard to old German language, literature, metre,
mythology, sagas, etc.

THE ORIENTAL TRIPOSES.

Two Examinations, one in the Semitic and one in the Indian Languages, were instituted in consequence of a Report issued by the Board of Oriental Studies, Nov. 13, 1871, expressing an opinion that "the time had now arrived for assigning to the Oriental languages a more prominent position amongst the studies at the University," and recommending the establishment of a Tripos or Triposes.

The study of the Oriental languages is now placed on the same footing as the other recognized branches of learning, degrees being conferred, and fellowships and scholarships being bestowed, by several Colleges for proficiency therein. These languages may compare very favourably with Classics and Mathematics as instruments of mental discipline and culture; their copious vocabularies and intricate grammatical systems call into play all the resources of the intellect, while the extent and antiquity of their literature, and its intimate connexion with almost all questions that we hold to be of vital importance, moral, social or religious,

cannot fail to attract and charm the thoughtful mind. It is true that as the Oriental languages are not yet taught, except to a very limited extent, in our schools, we cannot expect them to attain all at once to the same position as the more time-honoured and orthodox studies. The same amount of proficiency cannot, for instance, be expected of a man whose acquaintance with his subject dates only from his first entry at College as from another who has learnt the elements of his subject from his earliest years. Due consideration has been given to this point, and the standard has been greatly reduced, in quantity at least, from that originally proposed. When the importance of these studies becomes more fully recognised, and the fact that *the University confers honours and awards prizes for proficiency in Oriental languages* becomes more generally known, schools will, no doubt, by sending up boys properly prepared in these subjects, contribute towards raising the standard and giving effect to the movement. In order to meet the requirements of another class, those who having passed through one of the regular courses of study desire fresh fields for distinction, the time of residence requisite before becoming a Candidate for either of these Triposes has been extended for those who have passed in honours in any of the other Triposes, so that such students will still have two years before them to prepare themselves for examination in either the Semitic or Indian languages.

These two Triposes appeal to different classes of students, and a word or two to aid in making the selection will not be out of place. The Semitic Languages Tripos commends itself more particularly and obviously to the intending Divinity student, and it is not too much to say that if only a small proportion of those who take Holy Orders were to go through the course of reading prescribed in the accompanying lists it would lay the foundation of a much wider school of Theological criticism. Seeing that it is from the University that the ranks of the Church are chiefly recruited, this is surely a consideration that should have very great weight with all who have her interests at heart. But Arabic forms as important a part of this examination as Hebrew, Chaldee or Syriac; and as the Arabic language is not only itself spoken over an immense area, but is the key to all the vernaculars of the Mohammedan world, while the Arabic literature contains an inexhaustible treasure of historic, philosophic and even scientific lore, it cannot be said that the Semitic Languages Tripos is without practical interest either to those about to engage in active secular life or to those who intend devoting themselves to literary or speculative secular pursuits.

For those who look forward to a career in India, whether in the civil or military services of Government or in legal or mercantile capacities, the Indian Languages Tripos presents exactly the range of subjects which will prove of the greatest

value to them as a preparatory education. To candidates for the Civil Service of India under the regulations which come into force in 1892 these remarks are especially applicable. But here again, as in the other Tripos, the requirements of the more speculative scholar are not forgotten, and a thorough knowledge of Sanskrit is the most natural starting-point for investigating the comparative philology, mythology and sociology of the Aryan nations.

I have been compelled to dwell at some length on these points, as the study of Oriental languages has been for so long comparatively neglected in England that the fact is not yet recognized that they are of *great practical importance in the present day*, and the claims of the Oriental Triposes are likely to be overlooked as dealing with something antiquated and remote from the demands of modern progress.

The Examination for these Triposes commences in each year on the Monday after the last Sunday in May.

All students who pass the Examination so as to deserve Honours, are entitled to the degree of Bachelor of Arts.

The regulations as to the standing of Candidates, &c. are the same as for the other Triposes. A student who has obtained Honours in another Tripos, may be a candidate for Honours in either of these Triposes in the following or the next following year.

SCHEDULE OF THE ORDER OF DAYS, HOURS AND SUBJECTS AT
THE EXAMINATION OF CANDIDATES FOR HONOURS IN THE
SEMITIC LANGUAGES TRIPOS.

| DAYS. | HOURS. | SUBJECTS. |
|------------|----------|---|
| Monday... | 9 to 12. | Translation into Arabic. |
| | 1 to 4. | Selected portions of the <i>Ḳor'ān</i> , with Arabic commentary; Arabic Grammar, with passages for translation into English from a selected work of some native Grammarian. |
| Tuesday... | 9 to 12. | Selected Arabic works. |
| | 1 to 4. | Passages for translation into English from unspecified Arabic works. |
| Wednesday | 9 to 12. | Translation into Hebrew, and passages for pointing. |
| | 1 to 4. | Selected books of the Hebrew Scriptures, with a selected Hebrew commentary on one of the said books. |
| Thursday | 9 to 12. | Passages for translation into English from unspecified books of the Hebrew Scriptures. |
| | 1 to 4. | Paper on post-biblical Hebrew. |
| Friday... | 9 to 12. | Translation into Syriac; selected books of the Syriac Versions of the New Testament. |
| | 1 to 4. | Biblical Chaldee, and selected books of the Targums and of the Syriac Versions of the Old Testament. |
| Saturday | 9 to 12. | Selected Syriac works. |
| | 1 to 4. | Passages for translation into English from unspecified Syriac works. |
| Monday... | 9 to 12. | Comparative Grammar of the Semitic Languages. |
| | 1 to 4. | Literary History of the Semitic Languages. |

(a) The papers on selected works shall contain passages for translation into English, and questions on the subject-matter and criticism of such works.

(b) The papers on unspecified works may contain questions which arise immediately out of the passages proposed for translation.

(c) The paper on selected Arabic works shall include specimens of poetry and rhymed prose, with or without commentary. A competent knowledge of prosody and the rules of verse will be expected. The number of selected works shall be at least four. The *Ḳor'ān* and Grammatical works shall be excluded from this paper.

(d) There shall be at least four selected books of the Hebrew Scriptures and four selected Syriac works.

(e) The paper on post-biblical Hebrew shall contain passages for translation from at least two selected and two unspecified works.

(f) The Board of Oriental Studies shall publish a list of books bearing on the subject of the last day's Examination, and shall revise such list from time to time.

SCHEDULE OF THE ORDER OF DAYS, HOURS AND SUBJECTS AT THE EXAMINATION OF CANDIDATES FOR HONOURS IN THE INDIAN LANGUAGES TRIPOS.

| DAYS. | HOURS. | SUBJECTS. |
|------------|----------|---|
| Monday... | 9 to 12. | Translation into Sanskrit. |
| | 1 to 4. | Selected Sanskrit Dramatic and other Poems. |
| Tuesday... | 9 to 12. | Selected Sanskrit Prose works (including a philosophical treatise) and a selected portion of the Rig Veda with Sáyana's Commentary. |
| | 1 to 4. | Passages for translation into English from unspecified Sanskrit works. |

| DAYS. | HOURS. | SUBJECTS. |
|-----------|----------|--|
| Wednesday | 9 to 12. | Paper on Sanskrit Grammar, including a selected portion or portions of a work of some native Grammarian. |
| | 1 to 4. | Selected Persian works, including a portion or portions of the Masnavi. |
| Thursday | 9 to 12. | Translation into Persian. |
| | 1 to 4. | Passages for translation into English from unspecified Persian works. |
| Friday... | 9 to 12. | Persian Grammar, and Arabic Grammar with especial reference to the forms occurring in Persian. |
| | 1 to 4. | Selected Hindustani works, including the Intikhāb i Kulliyāt i Saudā. |
| Saturday | 9 to 12. | Translation into Hindustani. |
| | 1 to 4. | Passages for translation into English from unspecified Hindustani works. |
| Monday... | 9 to 12. | Comparative Grammar of the Indo-European Languages. |
| | 1 to 4. | History of the Indian Languages, Literature and Philosophy. |

(a) The papers on selected works shall contain passages for translation into English and questions on the subject-matter and criticism of such works.

(b) The papers on unspecified works may contain questions which arise immediately out of the passages proposed for translation.

(c) A competent knowledge of prosody and the rules of verse will be expected.

In order to obtain a place in the First Class in the Semitic Languages Tripos it will be necessary to exhibit a competent knowledge of *two* out of the three languages, Arabic, Hebrew and Syriac, as well as of the Comparative Grammar of the Semitic

Languages. For a First Class in the Indian Languages Tripos the Candidate must also be successful in two subjects, either in Sanskrit and Comparative Grammar, in Persian (including the Arabic element) and Comparative Grammar, or in Hindustani together with either Sanskrit or Persian.

The following are the lists of subjects prescribed by the Board of Oriental Studies for the Examinations in 1892, and those for subsequent years can always be found in the current issue of the Cambridge University Calendar.

SEMITIC LANGUAGES TRIPOS.

1892.

ARABIC.

Wright's Arabic Reading Book, Part First, pp. 21—93, and 181—208.

As-Suyūṭī, *Ta'riḫ al-Khulafā* (ed. Lees), pp. 257—339.

Al-Ḥarīrī—*Maḳāmah* 3, with Commentary (De Sacy's *Al-Ḥarīrī*, 2nd ed.).

The *Mo'allakah* of 'Amr ibn Kulthūm, with Commentary (ed. Arnold).

The *Ḳor'ān*, *Sūr.* 4, 90—114; with the Commentary of al-Baidāwī (ed. Fleischer) on *Sūr.* 4.

The *Alfiyah* of Ibn Mālik, with Commentary (ed. Dieterici), pp. 140—180.

HEBREW.

2 Samuel.

Psalms, Books I. II. with Kimchi's Commentary on Psalms 1—30 (ed. Schiller-Szinessy).

Isaiah. Proverbs.

Pirke Aboth (ed. C. Taylor).

Maimonides—The *Yad ha-ḥazakah*, Book I. (omitting part 4 הל' ע'כום).

SYRIAC AND CHALDEE.

The Acts of the Apostles in the Peshiṭṭā version.

The Epistle to the Hebrews in the Ḥarklensian version.

The Targum on 2 Samuel (Prophetæ Chaldaice, ed. De Lagarde).

The Targum on Isaiah, i.—xii. (Ibid.)

2 Samuel in the Peshiṭṭā version.

Wisdom in the Peshiṭṭā version (Libri Apocryphi Vet. Test. ed. De Lagarde).

Eusebius, Theophania (ed. Lee), Book 1.

Julianos der Abtrünnige (ed. Hoffmann), p. 99, line 12—p. 154, line 24.

S. Ephraemi Syri Carmina Nisibena (ed. Bickell) 1.—LVI.

The Apocryphal Acts of the Apostles (ed. Wright), pp. 1—168.

INDIAN LANGUAGES TRIPOS.

1892.

SANSKRIT.

Hitopadésa (ed. Johnson), Books II. and III.

Rámáyana (ed. Schlegel), Book II. Chaps. 68—115.

Málavikágnimitram (ed. Shankar P. Pandit, *Bombay Sanskrit Series*, VI.).

Manu, Books VI. VII. XII., with Kullúka's Commentary on Book XII.

Daśa-kumára-charita, Books I. III. (ed. Bühler, *Bombay Sanskrit Series*, pp. 40—47, 77—92); or, Aitareya Brahmana (ed. Aufrecht), B. II. pp. 28—59.

Ṛig-Veda. The 2nd and 3rd Anuvákas of the 4th Maṇḍala, with Sáyaṇa's Commentary, omitting the purely grammatical and ceremonial portion (Vol. III. pp. 68—165, ed. Max Müller); and Grassmann's Wörterbuch zum Ṛig-Veda.

The Sāṅkhya Aphorisms of Kapila, ed. Ballantyne (1885), Book I.

Siddhānta-Kaumudī, part of the section on compounds (Calcutta, 1864). Vol. I. pp. 336—398.

PERSIAN.

The Masnawī of Maulānā Rūmī, Book II. To the end of the Story of the Sultan's Slave (Lakhnau edition, A. H. 1282, pp. 100—136).

The Shāh Nāmah; part of the Story of Siyāvush (ed. Vullers, pp. 523—620).

Selections from the Dīwān i Ḥāfiẓ. The Ghazals in ا, ب, ي (ed. Rosenzweig-Schwannau).

Gulistān (ed. Platts), Books I—IV.

Akhlāk i Jalālī (Lakhnau Edition), pp. 19—94, 122—134.

HINDUSTANI.

Intikhāb i Kulliyāt i Saudā (Calcutta, 1847), pp. 1—118.

Taubat un-Nasūh by Maulvi Ḥāfiẓ Nāzir Aḥmad of Delhi.

Akhlāk i Hindī (ed. Syed Abdoollah).

The Ārāyish i Maḥfil of Afsos (ed. Lees, or Calcutta Edition of 1808).

The foregoing schedules and lists contain all that is required for the Examination; the respective Professors will afford every information and help to intending candidates, in addition to the lectures which they, and other members of the University, specially appointed for the purpose, give in each of the subjects. These lectures include elementary instruction; but those who wish to make a beginning with one or more of the languages before

matriculation will do well, in the case of Hebrew, to ascertain what text-books are used in the College which they propose to join, and in the case of the other languages to communicate with the Professors, who will be glad to give advice for a course of preparatory study. It may be added that for beginners in Arabic and Syriac respectively the most convenient books are the Grammars of Socin (Williams and Norgate, price 7/6) and Nestle (ibid. price 9/-), which contain besides grammatical rules and paradigms short reading lessons and glossaries.

Of course the assistance of a competent teacher should be if possible obtained.

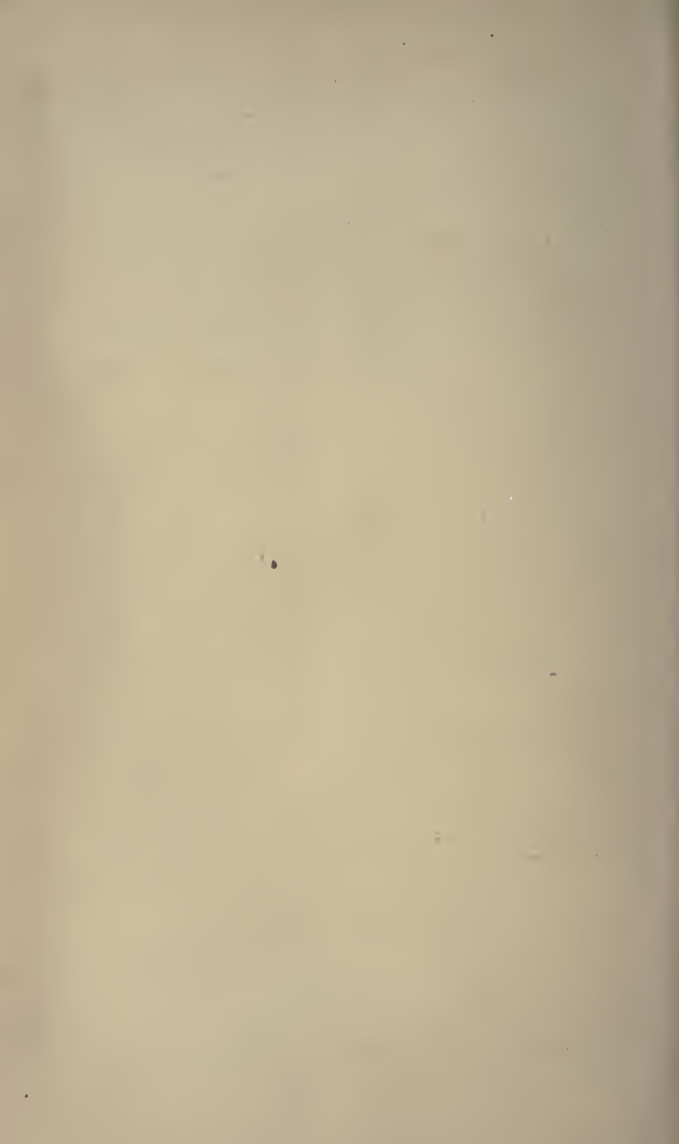
Beginners in Sanskrit will find all that they need in Macdonell's edition of Max Müller's Grammar; but Whitney's Sanskrit Grammar (2nd ed.) will be indispensable, if the student intends to work at the language of the Veda and comparative philology. Lanman's Sanskrit Reader, with its vocabulary and notes, will supply him with a series of well-chosen extracts.

Beginners in Persian should provide themselves either with Mírzá Ibrahím's *Persian Grammar*, or Chodzko's *Grammaire Persane*; and with Platts' edition of the *Gulistán* of Sa'dí, which contains a full vocabulary.

Platts' *Hindustani Grammar* is recommended for students of the Urdú language.

In conclusion, I would remind the student, that the Oriental languages are by no means so

difficult or so abstruse as is generally supposed. The use of an unfamiliar character, and the want of popular information about them, have kept them out of the ordinary range of educational subjects; the Arabic, Hebrew or Sanskrit characters may however be completely mastered in a few days by any person of average ability, and this Rubicon once crossed, the rest of the way will be found smooth and easy enough.



**University of Toronto
Library**

**DO NOT
REMOVE
THE
CARD
FROM
THIS
POCKET**

**Acme Library Card Pocket
LOWE-MARTIN CO. LIMITED**

